Austria ... Sch. 18	Indonesia ... Rp 2500	Portugal ... Esc 75
Bahrain ... Din 0.650	Italy ... L 1100	S. Arabia ... Rls 6.00
Belgium ... BFr 38	Japan ... Y550	Singapore ... S$ 4.10
Canada ... C$2.00	Jordan ... Fils 500	Spain ... Pta 100
Cyprus ... Mils 600	Kuwait ... Fils 500	Sri Lanka ... Rup 30
Denmark ... Dkr 7.25	Lebanon ... £L 6.00	Sweden ... Skr 6.50
Egypt ... E£1.00	Luxembourg ... LFr 38	Switzerland ... SFr 2.00
Finland ... Fmk 5.50	Malaysia ... Rm 4.25	Taiwan ... NT $35
France ... FFr. 6.00	Mexico ... Pes. 300	Tunisia ... Din 0.600
Germany ... DM 2.20	Morocco ... Dh 6.00	Turkey ... L 160
Greece ... Dr 60	Netherlands ... Fl 2.50	U.A.E. ... Dh 6.50
Hong Kong ... HK$ 12	Norway ... Nkr 6.00	U.S.A. ... $1.50
India ... Rup. 15	Philippines ... Pes. 20	

FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,305 Wednesday April 25 1984 D 8523 B

U.S. fear of high-tech piracy may threaten research, Page 19

NEWS SUMMARY

GENERAL

Brasilia tense ahead of key vote

Tension mounted in Brasilia yesterday ahead of today's congressional debate on restoring direct presidential elections to Brazil and ending 20 years of military rule.

Strict controls are in force on all air and road entry points to the capital, and radio and television broadcasts in the area are being censored.

The opposition motion to restore a direct vote is unlikely to succeed, but the Government's tactics are not clear. It may present its own proposal for direct elections in 1988. Page 20

Afghans take valley

Afghanistan said its forces captured the strategic Panjsher valley, between Kabul and the Soviet border, from rebel guerrillas in a spring offensive.

Warning from army

El Salvador's army said it had prepared a message for the winner of the May 6 presidential election, telling him to stay out of military affairs.

Death threat charge

Romanian émigré Jean Paul Gabor was charged in San Antonio, Texas, with threatening to kill Democratic presidential candidate Walter Mondale.

Nuclear deal

The U.S. and China have ended talks on a nuclear co-operation deal which should be ready for President Reagan to sign when he visits Peking this week. Page 4

Genoa port shut

Genoa port was paralysed by dockers striking against a management attempt to regain control of its running. Page 3. Japanese dockers began an indefinite strike at 10 big ports.

Libyans on way

Tripoli sent three officials to London to supervise the departure of the occupants of the People's Bureau, which has been under police siege for more than a week. Page 20

Threat to dissent

A senior Yugoslav official warned dissidents that the country would use all possible means to stamp out dissent. Page 2

Indian border clash

India and Bangladeshi troops exchanged fire for several hours along their border, where India is putting up a barbed-wire fence.

Death sentences

A Banjul court sentenced 24 people to death for their part in an attempted coup in The Gambia in 1981, in which 800 died.

Sadat men dropped

Egypt's President Hosni Mubarak dropped several leading names of the Sadat era from his National Democratic Party's list of election candidates. Page 9

East Germans held

Dozens of East Germans have been taken into custody after applying to leave the country for West Germany. Page 3

French drug raid

French police seized six tonnes of hashish and 50 kilos of opium, claimed to be worth $37m, near Versailles, in what they said was their biggest drug haul.

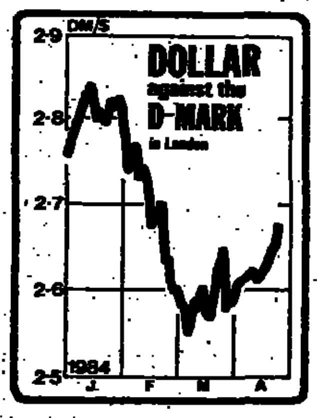
BUSINESS

Exxon's 3-month profits up 39%

EXXON, world's biggest oil company, reported first-quarter net income up 39.2 per cent to $1.47bn, underlining the oil majors' strong recovery. Lex, Page 20; Page 21

OCCIDENTAL Petroleum of the U.S. will this Sunday sign a $600m deal with China to develop what is said to be the world's biggest open-cast coalmine. Page 4

NESTLÉ Group of Switzerland is in talks which may lead to a bid of over $500m for Coopervision, a leading U.S. contact lens maker. Page 22



DOLLAR improved in London on fears of higher U.S. interest rates, closing at DM 2.6795 (DM 2.657), SwFr 2.2165 (SwFr 2.195), Y225.45 (Y224.75) and FFr 8.239 (FFr 8.165). Its trade-weighted index was 128.8 (127.8). Page 39

STERLING fell 95 points in London to $1.409 and was lower at Y318 (Y319), but otherwise firmed to DM 3.7775 (DM 3.77); SwFr 3.125 (SwFr 3.115) and FFr 11.6075 (FFr 11.58). Its trade weighting was unchanged at 79.9. Page 39

GOLD fell $1.25 in London to $383.75. In Frankfurt it was $2 lower at $383.25 and it lost $1.5 in Zurich at $383.5. Page 38

COCOA prices continued to surge in London, with the July quotation ending £48 up at £1,894 a tonne. Page 38

LONDON: FT Industrial Ordinary index closed 3.8 down at 876.2. Report, Page 33; FT share information service, Pages 34-35

WALL STREET: Dow Jones index was up 11.83 at 1,161.33 before the close. Report, Page 29; Full share listings, Pages 30-32

TOKYO: Nikkei Dow index shed 38.96 at 10,761.82. The Stock Exchange index was 3.13 off at 845.38. Report, Page 29

HONG KONG: share prices dropped in response to Britain's announcement that it would stop administering the colony in 1997. The Hang Seng index closed 45.83 down at 1,070.62, eight above the day's low. Page 5; Report, Page 29; Lex, Page 20; Leading prices, other exchanges, Page 32

INTEREST RATES in the Danish bond market fell sharply yesterday, with the effective yield on 20-year government bonds coming down by half a percentage point to 14.4 per cent, a point lower than at the beginning of last week.

SPAIN: shareholders of a dozen electrical utilities face lower dividends under government proposals for reinforcing their finances. Page 22

UNION CARBIDE, U.S. chemical company, lifted net profits 123 per cent to $107m, $1.51 a share, in the first quarter. Page 21

The editorial content of today's international edition has been restricted because of industrial action by IG Druck und Papier at Frankfurter Societäts-Druckerei, where the edition is printed. This prevents the publication of late-breaking news, the final Wall Street report and closing U.S. share prices.

Nippon Kokan to buy half stake in National Steel

BY TERRY DODSWORTH IN NEW YORK

National Intergroup, the fourth largest U.S. steel company, is linking with Nippon Kokan of Japan, in a joint venture which involves the sale of 50 per cent of its steel division for $292m.

The agreement, announced in Pittsburgh yesterday, was described as an historic event by Mr Howard Love, National Intergroup's chairman. It brings to an end a period of speculation about the future of National's steel activities after its attempt to sell them for $575m to U.S. Steel was stopped by the anti-trust authorities.

Mr Jim Haas, President of National Intergroup, said that he expected that Nippon Kokan (NKK), which is the second largest Japanese producer, to take a full managerial role in running the three plants involved in the agreement.

No redundancies or closures were contemplated, he added, and he was confident that the relationship would benefit all employees.

This reference was seen as an important sign to the steel trade union, which only a year ago came into violent opposition with another NKK plan to buy the Rouge Steel plant belonging to Ford Motor company in Detroit. Union opposition was the principal factor in undermining that deal.

Mr Haas said that the new steel company, which will be headed by Mr Love, as chairman, will be run as a separate entity and treated as an investment on the parent group's books.

It would benefit, he added, from NKK's proven expertise in quality and process control.

From NKK's point of view, the deal will be of value in providing it with better access to the U.S. market, which is partially closed to Japanese producers at present, under a voluntary quota arrangement.

Despite continuing pressure on steel prices in the U.S. market, they are higher than prices available in most other markets. In addition, National's operations are concentrated in the higher margin flat rolled products, which are enjoying buoyant demand from the expanding motor industry.

The U.S. company's three plants are also based in the Midwest, which Japanese companies have always found expensive to supply because of transport costs – Japanese sales tend to be concentrated on the East and West coastal areas.

National's steel operations are reckoned to be among the best in the U.S. and have benefited from extensive rationalisation over the past few years. They have been profitable for the last four quarters, a period in which most of the U.S. steel industry has been losing money.

The two sides started talking, said Mr Love, last year, but the talks were broken off when U.S. Steel made its offer. Discussions were resumed again when that deal fell through. Mr Love added that the agreement with NKK will allow the parent group to concentrate on its plans to diversify in the financial services sector and overseas.

Controversy on dismissal of Saudi minister

BY MICHAEL FIELD IN LONDON

THE DISMISSAL of Dr Ghazi Algosaibi as the Saudi Arabian Minister of Health and the accompanying debate over the greed of the Kingdom's royal family is being seen as one of the most important political events in the country since the occupation of the Grand Mosque in Mecca in 1979.

Dr Ghazi Algosaibi

Dr Algosaibi, who was dismissed at the weekend, became Minister of Health last October after serving as Minister of Industry and Electricity since 1975 in 1982-83. He had held both portfolios together.

The Health Ministry is one of the kingdom's biggest spending agencies, with a 1983-84 budget running at about $6bn.

Dr Algosaibi was the most effective of the modern technocrat ministers in the Saudi Arabian Government and was extremely popular with the Saudi bourgeoisie – and particularly with the Kingdom's press. His dismissal is important because it followed a direct challenge to King Fahd.

The reason for the dismissal is that Dr Algosaibi had incurred the disfavour of senior members of the Saudi royal family and had challenged the King to support him in a poem he wrote for the Riyadh newspaper, Al-Jezira.

The 50-line poem was published on March 5 and was entitled "Al-Mutanabbi's last message to Saif al-Dowlah."

The two characters in the title were a famous court poet and the poet's employer, Saif al-Dowlah (The Sword of the State), who ruled in Aleppo in the tenth century.

The poem ran roughly as follows: "Why have you forsaken me and why do I no longer receive your friendship? ... Why do you listen to these false voices? They deceived you and their deception was to your liking, but previously you never used to be moved by this perfumed falsehood.

"I am not going to compete with these cheap people ... Instead I shall take to the desert. The desert is more generous. Its munificence is not cut off ... It is more truthful than a friend whose friendship is changeable and of varying colours ... Never mind the consequences, I am not interested in wealth.

"Oh my Lord, oppression is not to be welcomed, but if this is what you want then so be it ... A pen which is bought and sold is not the equivalent of one which writes with tears ('the blood of the eyes') streaming down it."

It is suggested that Dr Algosaibi wrote his explosive lines specifically to cause a furore, in order to delay what already looked like his inevitable dismissal. The Saudi royal family hates nothing so much as to be seen acting in response to internal or external political pressures.

The minister's career reached a crisis because he had made enemies. Most seriously, in the Council of Ministers he had challenged Prince Sultan, a full brother of the King and Minister of Defence, on a Spanish defence contract which had not gone out to tender.

The Prince in turn had challenged Dr Algosaibi over a medical contract. The Minister replied that this had not been offered for tender because it was part of an Australian Government technical assistance programme.

The poem was an open criticism of the King's failure to support Dr Algosaibi in this battle, which was seen as being related to the whole issue of the greed of members of the royal family.

This has been manifest in senior princes at the head of ministries receiving payments from suppliers to

Continued on Page 20

Inflation hopes boost dollar

By Max Wilkinson in London and Nancy Dunne in Washington

THE DOLLAR showed a renewed bout of strength yesterday, borne up by optimistic pointers for U.S. inflation and market fears about industrial unrest in Britain and West Germany.

In the first day of European trading after the Easter break, the dollar rose strongly, to close in London at DM 2.6795, more than 2 pfennigs higher than its close on Thursday.

Although trading was thin, the market appeared to endorse the upward movements of the dollar in New York over the Easter period when the U.S. currency breached the DM 2.65 "resistance point" in spite of heavy intervention by the West German central bank, the Bundesbank.

The dollar's strength, helped before Easter by the larger than expected first-quarter growth rate for the U.S. economy of 8.3 per cent, was given further momentum yesterday by the U.S. consumer price index for March.

The index rose a modest 0.2 per cent last month, an increase widely interpreted as heralding good news of a moderating economy.

Mr Martin Feldstein, chairman of the Council of Economic Advisers, said that the rise was "further evidence that the economy is not overheating." He noted that even without a "welcome" 0.1 per cent decline in food costs, consumer prices rose only 0.3 per cent last month.

The drop in food prices, the first since last July, represented a sharp turnround from the 2.4 per cent increase in January and the 0.9 per cent climb in February. Fuel oil prices declined 4.3 per cent. Transport costs rose by 0.9 per cent and medical costs by 0.5 per cent.

The report was especially welcome after a January increase of 0.6 per cent and February's 0.4 per cent rise.

Many analysts, worried that the economy had surged too fast too soon, were caught unprepared by the moderate increase. For the first quarter, when the effects of last summer's drought and December's freeze were reflected in food prices, the index rose at a 5 per cent annual rate.

Money markets, Page 39

Lagos scraps naira in attack on corruption

BY ANDREW GOWERS IN LONDON

NIGERIA's decision to scrap its currency and start again with a new naira marks a sudden increase in the military Government's attack on corruption and the drain of money from the country.

It is not expected, however, to have more than a passing impact on companies doing business in Nigeria or with the country, and it does not fully address the country's more deep-seated economic problems, according to diplomats in Lagos and foreign businessmen.

The move, announced on television on Monday night by the regime's number two, Brig Tunde Idiagbon, is effectively aimed at depriving naira held outside Nigeria of any value.

With land borders closed from yesterday and all passengers – even diplomats and their luggage – arriving or departing by sea or air subject to rigorous searches for cash, currency held outside the country is "stranded."

An accurate estimate of how much this involves is impossible: some diplomats believe it may not be much more than N1bn to N2bn ($725bn to $1.45bn), which is small compared with the massive amount of currency in circulation within the country. The majority of the cash smuggled out of Nigeria in recent years will already have been converted into hard currency.

Nevertheless, foreign observers see the move as an overdue and not altogether surprising effort to staunch the flow of currency abroad. It will also, no doubt, prove politically popular at home as it hits the wealthy and corrupt "saboteurs" so often pilloried by Maj Gen Muhammadu Buhari's regime since it seized power on New Year's Eve.

For the many Nigerians with large amounts of cash within the country, the immediate result is likely to be at best huge personal inconvenience and at worst a heavy loss.

From today until May 6, when the naira ceases to be legal tender, amounts of up to N5,000 will be exchange for new banknotes (in the same denominations, but in new colours) over the counter with no questions asked.

Any sums in excess of this will have to be initially deposited in bank accounts; the depositor will also be asked to produce a sworn affidavit as to the source and ownership of his funds.

Thus it is hoped that whose with ill-gotten gains will be exposed. In fact, there is reason to doubt whether the system will operate with great efficiency or that it will catch as many "big fish" as the authorities might wish. One obvious loophole is to spread funds for exchange in tranches of N5,000 around as many friends and relatives as possible.

The authorities face enormous obstacles in implementing their ambitious currency swap. Although it appears that new banknotes are ready to be put into circulation almost immediately, Nigeria's customary distribution problems mean that it is highly doubtful that all parts of the country will be supplied by the May 6 deadline. An additional problem is that for many companies, the monthly payday is nigh, creating an additional demand for banknotes.

Aside from that, and the possibility that the imminent demise of the old currency will cause a feverish rush to spend it and a consequent bulge in prices, diplomats and businessmen do not expect commercial activity to be gravely impaired.

Most reputable trading companies probably do not hold large amounts of naira either inside the country, or outside (which is illegal under Nigeria's exchange control rules). For them, there is just the prospect of yet another bureaucratic knot to add to the existing tangle.

For the several foreign banks which trade unofficially in (quite small sums of) naira, the Government's move means greater uncertainty. It was unclear yesterday whether the Nigerian authorities would make an exception for the banks and accept the return of notes held outside the country, but this seemed somewhat unlikely. Some banks in London yesterday ordered a halt to trading in the naira while they awaited clarification from Lagos.

For the authorities however, the advantages of the new currency regime could be considerable. For one thing, the Government, using the excuse of corruption, will not be issuing as many naira as it withdraws. This means that, if used sensibly, the new issue of banknotes could be a means of getting a firmer grip on money supply, and possibly on Nigeria's rampant inflation.

In the next few weeks it is also likely that the currency change will cause the gap between the naira's official and unofficial exchange rates to narrow significantly. The official rate is currently at an artificially-high 1.09 to the pound sterling, while before they stopped trading yesterday, commercial banks

Continued on Page 20

Moussa plans comeback after acquittal

By David Marsh in Paris

M PIERRE MOUSSA, the former chairman of now-nationalised French investment bank Paribas, plans a comeback on the international financial stage after being acquitted yesterday on charges of exchange control infractions.

M Moussa, who resigned from the bank in October 1981 in the midst of a furious political row over the Socialist Government's nationalisation programme, is understood to be planning to set up with International Investors, a Luxembourg-based investment banking institution with a capital of around $100m.

Yesterday's acquittal, following a long-running trial in a Paris magistrates court, brings to an end one of the most emotional financial dramas in post-war France.

It comes nearly 2½ years after the Government brought charges against M Moussa in what was widely seen as an act of political revenge for his success in freeing from nationalisation part of Paribas' foreign activities.

The court, however, yesterday handed down fines and sentences against former Paribas executives and clients involved in channelling funds into Swiss bank accounts under an illegal cash smuggling network uncovered by French customs in November 1980.

M Moussa, who has been working during the last two years building up a financial advisory company, took a philosophical view of the court case.

Regarding the Government's bringing of charges in November 1981, he said. "I have no feelings of rancour. I can understand that they (the Government) were over-excited.

"It was due to the circumstances and their lack of experience," M Moussa said. "Most of the mistakes they made (after coming to power in May 1981) were because they knew so little about real things. It was not really their fault – since then, they have learnt a lot."

The charges, accusing M Moussa of responsibility for irregularities uncovered in the bank's department handling private clients' wealth, were brought by M Laurent Fabius, now the Industry Minister, in his previous capacity as Budget Minister.

This came shortly after a political furore – in which M Moussa came under scathing personal attack in the National Assembly from M Pierre Mauroy, the Prime Minister – over Paribas' discreet but perfectly

Continued on Page 20

CONTENTS

Yugoslavia cracks down on dissent

By David Buchan in London and Aleksandar Lebl in Belgrade

A SENIOR Yugoslav official warned yesterday that the authorities would "use all means" to stamp out dissent. Mr Zika Radojlovic, a Communist party leader in Serbia, referred to some 30 dissidents seized last Friday as "enemies."

All but one of the group arrested while meeting in a Belgrade apartment, were yesterday said to have been freed or on the point of being released after interrogation. They included Mr Milovan Djilas, Yugoslavia's most famous dissident.

Mr Srdjan Popovic, a well-known human rights lawyer arrested subsequently, was also released yesterday.

The harassment is seen as part of a wider crackdown against political dissent, particularly in Serbia, where local Communist organisations have been agitating

It may also tarnish Yugoslavia's generally moderate political image in the eyes of Western governments which mounted an exceptional effort last year and this to help the country overcome its debt crisis.

Police are said to have warned Mr Djilas (73), who on Friday was giving his views on Yugoslavia's sensitive nationalities issue, not to give public interviews.

Portugal learns the difficult lessons of democratic government

Diana Smith reviews progress since the revolution ten years ago

A FOREIGN embassy in Lisbon's elegant Rua do Sacramento has just been painted salmon pink—the *cor de grao* characteristic of houses in the capital.

Residents of that street—mostly diplomats or vestiges of the wealthy old guard that once ruled Portugal—can be fairly sure that their freshly-painted walls will not be daubed with political slogans, calls for Nato to go home or multi-layered, peeling posters. The street is patrolled by police whose presence discourages paint sprayers and poster pasters.

Elsewhere in Lisbon, the walls colourfully testify to 10 years of freedom of expression, granted at dawn on April 25 1974, when disillusioned junior officers carried out a bloodless coup d'etat ending nearly 50 years of isolationist, dour dictatorship backed by political police who treated would-be wall-daubers with savage repression.

The coup ended not only an entrenched dictatorship but an 13-year-old war in Angola, Mozambique and smaller African colonies. With the flowering of carnations in rifle butts on those April days a decade ago, came a burst of relief at the end of the useless loss of young lives in an Africa bent on shedding colonial strictures. There was also an outburst of repressed urges—political, social, and cultural—that the Portuguese had held back for too long.

At first such sudden, untrammeled freedom of choice brought irresponsibility, petty vendettas and some vandalism, plus verbal diarrhoea that lasted for several years. Prevented from saying what they thought for half a century, the Portuguese flooded themselves and onlookers with opinion and garbled political rhetoric, hastily mustered from half-read books. They talked themselves and audiences numb on the media, in cafes, at work and on the streets.

The Communists were the only political force ready after years of disciplined waiting underground to step into a power vacuum. Their first moves frightened Portuguese who had silently longed for the end of oppression into wondering whether the old regime were not the lesser evil.

Communist-enforced, arbitrary nationalisations that seized half Portugal's gross fixed capital formation and drove owners into jail, then into exile, baulked the country's chances of emerging from an economy decades behind post-war Europe into something solid and diversified.

The clientele of the Left was rewarded by jobs for the boys running into rundreds of thousands. Full employment regardless of a company's capacity to pay wages or secure orders turned the new State sector into a herd of white elephants, lumbering through the first, then second, oil crisis with dwindling production and sky-rocketing costs.

Political freedom has not been matched by genuine economic opportunity. That is Portugal's sorest burden in 1984. Nine years of public sector overmanning and underproducing have had to be counteracted by ruthless austerity and the lowest paid have had to foot the largest bill.

Portugal's most internationally-known politician, Sr Mario Soares, the present Prime Minister, a genuinely compassionate man, faced a Hobson's choice. He had either to go for austerity, hoping it would pay off economically, or he could have taken a softer line, which would have boosted his popularity, but pushed Portugal down the slippery slope to bankruptcy. The political pay-off for his austerity has been a steep drop in his popularity at home.

Abroad, he has earned kudos and Portugal's borrowing has become easier. The man in the street has not quite made the connection between foreign loans and his daily bread, but the austerity has bitten hard and is working. Unfortunately for the small shopkeepers who enjoyed a boom when Portuguese people were spending beyond their means, successful austerity has brought many bankruptcies.

Despite the real suffering, in this land of genuinely full freedom of expression no one (outside devout party members) is heard clamouring for a Communist takeover. Nor are there serious efforts to restore another authoritarian regime.

Before the coup Portugal more resembled the 19th than the 20th century. That was agreeable for the "haves"; the rest had the choice of subservience without job security, emigrating in search of advancement, or going underground politically.

When the coup aftermath altered the status of the most powerful "haves," the social fabric had to be rewoven, including assimilating 800,000 refugees from the former colonies. The result is often quirky, but surprisingly adaptable for a nation untrained for open society.

Those who were children or in their teens when the coup came, are more willing to experiment, to create in music, books, and films, to travel and to learn from it, than young Portuguese a decade ago. Memories of po-faced adolescents with bored expressions, talking desultorily about people, never ideas or events, have not quite faded and contrast sharply with the gaiety and good-natured brashness of Portuguese young people today.

But Portugal's young, after 10 years of free politics and uncensored media, are often sceptical about their politicians.

The self-styled political class, mainly lawyers who went to the same schools and universities and love theory and intrigue, must take some blame for public disillusionment. However, 50 years of political repression is hardly a good school for political maturity—and they are learning.

Today's scepticism is a far cry from the apathy, the self-righteousness and dogged immunity to ideas preached and practised in Portugal before 1974.

The freedom to make a mess of other people's walls has sloppy connotations, but most wall-owners shrug off fading grafitti and peeling paper more easily than tapped telephones, 250,000 informers denouncing neighbours, friends and family to the political police, censorship of media and the arts and persecution by paramilitary thugs in dark glasses.

The Portuguese could have talked less and done more since April 1974, but they are trying valiantly to master the difficult art of democratic government.

REVOLUTION on the streets of Lisbon 10 years ago today. A young soldier sports a flower in the barrel of his rifle

PRESIDENT Antonio Ramalho Eanes of Portugal has approved a cautious abortion law passed by Parliament in January. He consulted all eight parties in Parliament, sounding them out about a national referendum on the issue. Most expressed their strong disapproval of such a move.

The powerful Roman Catholic Church has fiercely opposed any liberalisation of abortion, but there are estimated to be well over 100,000 illegal abortions performed in the country each year, especially among poorer and less educated women.

U.S. grounds Soviet satellite launch hopes

BY PETER MARSH

THE U.S. Government will block any move by Inmarsat, an international body that operates communications services for ships, to use a Soviet rocket to put into space a new generation of satellites.

The State Department says "under no circumstances" would it permit the transfer to the Baikonur rocket site in Soviet Central Asia of the U.S.-made parts that the satellites are certain to contain.

Such a transfer would be prohibited under the Munitions Control Regulations, which seek to stop the channelling to unfriendly countries of high-technology components that have military aplications.

Communications satellites behave as sophisticated telephone and data exchanges in the sky. They contain advanced electronic components of just the kind that President Ronald Reagan's Government, through its controls over the transfer of technology, is attempting to prevent reaching the Soviet Union, on the grounds that they aid the latter's weapons build-up.

The U.S. action is a blow to efforts by the Soviet Union to sell to the West launches on its Proton rocket. Moscow told Inmarsat last year that it would put up satellites for about $25m per launch, about half the price with the space shuttle or Europe's Ariane rocket.

Inmarsat, which is owned by about 40 countries including the U.S. and the Soviet Union, regards the Proton as one of six possible launch vehicles for a new generation of satellites to be placed in orbit in the late 1980s.

The organisation is based in London and earns about $40m a year. It operates a network of five satellites, in geostationary orbit 36,000 km above the Equator, with which it transfers telephone calls and data between shore bases and about 2,300 ships.

Morsvlazsputnik, the Soviet satellite communications agency, has supplied Inmarsat with technical details of the Proton so it can make a proper evaluation. "We are treating the Soviet bid as a serious offer," said a spokesman. "We want to have open to us (for launch vehicles) the greatest number of options."

Soviet space engineers have, with three exceptions, used their rockets only to put into space Soviet satellites or manned capsules. The exceptions were the launch of Indian satellites from 1975-1981.

For its new series of up to nine communications satellites that may cost $500m, Inmarsat earlier this month received bids from two international consortia, both of which have a strong U.S. presence.

The winning consortium, which Inmarsat will select next year, will either sell or lease the satellites to the organisation.

Hughes Aircraft of the U.S. has teamed up with British Aerospace in one venture. The second consortium involves Ford Aerospace of the U.S., Marconi Space Systems of Britain, and Aerospatiale of France.

The U.S. move makes clear that if Inmarsat were to choose the Proton launcher, then only the non-U.S. parts of the satellites would be permitted to travel to the Soviet Union for the launch.

The U.S. has 23 per cent of the shares in Inmarsat, followed by the Soviet Union with 14 per cent. Britain has the next biggest stake, 10 per cent.

The consortia were asked to ensure that their satellites were compatible with at least two of a total of six launch vehicles. These are: the Proton and the space shuttle, which are operated by government agencies; Ariane, which is sold by Ariane space, a semi-public body in France; and Delta, Titan and Atlas-Centaur, three rockets sold by private companies in the U.S.

These specifications are not overriding. Assuming Inmarsat decides to purchase the satellites outright, the organisation wants to have the opportunity to decide for itself—possibly on grounds of price—which launch vehicle to select.

If Inmarsat were to lease the vehicles from the satellite builders, then the winning consortium would have the final say over which launch service to use.

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Fiat to stop making medium-sized lorries in France

BY PAUL BETTS IN PARIS

FIAT PLANS to stop making medium-sized torries in France and will shut its plant at Trappes south-west of Paris.

Iveco-Unic, the French subsidiary of Fiat's Iveco truck group, is expected on Friday to announce closure of the large manufacturing plant, with the loss of 1,250 to 1,350 jobs. The move is part of a major restructuring of Iveco's French operations which are expected to report a loss of about FFr 340m (£29.5m) for 1983, against earlier forecasts of FFr 250m.

It comes at a time of continuing recession in both the French and European truck markets. Renault Vehicules Industriels (RUI) the large truck subsidiary of the State-owned Renault group, last week reported a FFr 1.9bn loss for last year.

Iveco intends to maintain its French engine manufacturing operations, although it has warned that it might be forced to make more workers redundant because a French government order for 500 of its Lorraine-type buses, built at its Fourchambault plant, has fallen through.

Fiat is also continuing to make fresh investments in France. Its agricultural equipment subsidiary announced last Friday it is paying FFr 75m for Braud, the French company which is the leading European manufacturer of grape harvesting machinery.

Iveco's plant at Trappes was built in 1973 at a time of strong expectation of growth in the truck market. It has an annual capacity of 22,000 lorries, but produced only 6,112 last year. The company felt it had no alternative to closure because of the slump in the market and the generally bleak longer term outlook.

Up to now it has been the second largest lorry maker in France after RVI. Trappes produced medium-sized vehicles in the 10-16 tonnes range for Europe. A price discount war in France has plagued the main producers for the past 12 months and has cost Iveco dearly.

The company expects its French truck operation to lose even more money this year, reflecting the costs of the restructuring.

Iveco's is the latest in a series of large industrial restructurings in troubled sectors of French industry. Michelin, the French tyre maker, last Friday announced plans to cut 5,000 jobs by the end of next year. RVI wants to reduce its workforce by 3,750, while Citroen is seeking 6,000 job cuts.

The list is further inflated with the restructurings at Dunlop's French tyre operations due to be taken over by Sumitomo of Japan, and Renault's job reduction plans for its big car division, not to mention the French steel and coal industries.

Air traffic controllers step up action against new Bill

BY DAVID HOUSEGO IN PARIS

FRENCH AIR traffic controllers yesterday intensified their five-day strike delaying flights throughout much of France.

The stepping-up of their campaign came on the eve of the presentation in the National Assembly of a government Bill that would lift the 20-year-old ban on strike action by traffic control staff. In spite of the ban, air controllers have regularly come out on strike for better pay and conditions.

The controllers' objection to the Bill which M Charles Fiterman, the Minister of Transport, will present is that it imposes a minimum work load during a strike period that would, on the controllers reckoning, guarantee 70 per cent of normal flights. The Government says that only 10 per cent of flights would me maintained.

This minimum service in the Government's eyes is needed primarily for defence reasons and to safeguard international flights over French territory.

Yesterday's stoppages caused two-hour delays at the two Paris airports of Orly and Roissy, as well as at other provincial airports. International flights overflying French territory were also effected.

Stable outlook for EMS

BY OUR BRUSSELS STAFF

System, which holds EEC currencies except sterling within a specified parity band should have a period of stability this year, the European Commission said yesterday in its latest review of monetary policy.

It warned, however, that there could be strains because of "the international monetary environment" — presumably a reference to likely fluctuations in the dollar.

Although the respective inflation rates of EEC countries still diverge, the Commission thinks that the trend in economic fundamentals is favourable towards stability in the sixth year of the EMS existence.

Cost and price pressures, resulting fro mthe different levels, of performance in the EEC economies, most obvious in 1981 and 1982, have diminished, the Commission said. Current account positions have been brought more closely into line with each other.

The trend should continue this year, reducing pressures on the foreign exchange markets.

In fact, the EMS has had a relatively calm period since March 1983, the Commission observed — this, despite the tensions during the winter when the dollar fell back and the Deutsche Mark moved upwards.

This greater stability, it said, "it due to greater economic policy convergence and to an increasing trend towards restora-ion of external equilibria."

Bank says Belgian industry needs help

By Paul Cheeseright in Brussels

THE DEVELOPMENT of Belgian industry to take advantage of the third industrial revolution may be impossible to achieve, without help, according to Kredietbank. The influential bank is the largest financial institution in Flanders, the Dutch-speaking part of Belgium.

The comment was made in its latest analysis of economic trends in the country that highlights the structural weakness of Belgian exports. The economy is more than 40 per cent dependent on exports.

Kredietbank's suggested solution—its version of the help required—runs down two paths.

The first is financial. High corporate profitability is essential if stronger companies are to modernise and specialise. Measures to maintain and promote competitiveness will be needed over the coming years.

This line of thinking supports government policy which, since 1982, has been aimed at shifting resources from personal consumption into the corporate sector. The latest manifestation of this has been an austerity package designed to trim the public sector deficit.

The package has already provoked industrial unrest and is the subject of a new round of talks today between the Government and the main trade union groupings.

The second path which Kredietbank suggests should be followed is designed to help the weaker part of the corporate sector, where, it says, "involvement in the third industrial revolution is too sluggish and too patchy."

The impetus will have to come in the form of further foreign investment in the advanced metalworking industries of Belgium.

"Enough is at stake to approach some of the better foreign enterprises, offering them a package of serious fiscal and administrative incentives and getting them to bring the quality of the whole of Belgian industry up to scratch," Kredietbank proposes.

It notes that exports have remained the only engine of growth for the economy. Since 1982, the trade position has improved, helped by a devaluation in that year. In the first nine months of last year, the Belgo-Luxembourg Economic Union's trade deficit narrowed to BFr 4.7bn (£61m) from BFr 72bn (£939m) for the same period of 1982.

What worries the bank, however, is the nature of the exports. The metalworking sector failed to make a positive contribution to the trade balance; mechanical engineering has failed to gain advantages from modernisation.

Yet metalworking and heavily subsidised steel imports account for more than 20 per cent of goods exports, Kredietbank says.

But there has been an expansion in the exports of cars—Belgium has large assembly plants—furniture, rubber and plastic products, food and beverages and carpets. Here, the trend has been towards increasing specialisation.

IMF 'at limit' of ability to aid Third World

BY PETER MONTAGNON IN AMSTERDAM

THE International Monetary Fund has reached "the limits of its possibilities" in providing credits to developing countries, Mr Wim Duisenberg, governer of the Dutch central bank, said here yesterday.

In a speech to commercial bankers attending the annual meeting of the Asian Development Bank, he warned that efforts to make the IMF accept an ever-increasing share of the burden of financing the deficits of debtor countries would be counter-productive. They could even threaten its efficient functioning.

The IMF had already suffered a "serious deterioration" in its liquidity position through the provision of large balance-of-payments loans since the decision in 1980 to triple members' access to its resources, he said.

Last year's increase in quota subscriptions had "restored the IMF's liquidity position somewhat," but in future a more normal limit would have to be placed on members' access to loans until a further quota increases could be agreed.

Member countries can borrow a maximum of 125 per cent of their quota subscription from the IMF each year.

Borrowing by the Fund to increase its resources available for lending was only an interim measure, Mr Duisenberg said. Loans had been granted to the IMF by its richer member countries only on the basis that their claims on the fund remained short-term and liquid.

"I must warn against too great expectations of what the national monetary authorities and the international financial organisations can do," he said. "They should not attempt to take over the role of private creditors in the financial system."

Separately, Mr Willy de Clercq, the Belgian Finance Minister, said that the IMF would have to persuade commercial banks to continue lending "through the full exercise of its powers of moral suasion."

"A feasible adjustment path exists, provided that bank lending continues to expand at a rate of 5 per cent per annum until the end of the decade," said Mr de Clercq, who is also chairman of the IMF's Interim Committee.

The provision of new finance is essential to maintaining developing countries' willingness to repay their debts.

Andreotti sees Chernenko in Moscow

By Anthony Robinson

THE SOVIET President, Mr Konstantin Chernenko, yesterday warned Sig Giulio Andreotti, the visiting Italian Foreign Minister, that the deployment of U.S. cruise missiles in Sicily increased the risk of nuclear war. He described the missiles as "first strike weapons" whose deployment "seriously aggravated the war threat."

Sig Andreotti is the most senior Western politician to hold talks with Mr Chernenko since the latter became Communist party leader two months ago, apart from brief encounters after the funeral of President Yuri Andropov.

The Italian minister is believed to be a future candidate for the Italian presidency and his Moscow visit is partly designed to impress Communist voters at home. The Italian Communist Party does not like the new U.S. missiles in Sicily but has been muted in its criticism for fear of being branded a servant of Moscow.

Sig Andreotti politely rejected the implied threat in the Soviet position and repeated the view of the Nato governments that Moscow should resume nuclear disarmament talks in Geneva

Fight for control paralyses port of Genoa

BY JAMES BUXTON IN ROME

THE PORT of Genoa, Italy's largest, was still paralysed yesterday by dockers striking against the port management's attempt to regain control from the unions.

The strike began last Friday, ostensibly over objections by 104 workers to their treatment in a new grading and promotion system. But it became clear in comments at the weekend that the real issue is Sig Roberto d'Alessandro, the new government-nominated port chairman.

Sig d'Alessandro, a businessmen and the Socialist mayor of nearby Portofino, took over a few weeks ago with the job of reversing the port's falling traffic and mounting losses. The decline is due to highly restrictive labour practices, constantly mounting charges and a failure to invest in container handling equipment.

As a result Genoa has lost out to Savona and La Spezia, while the city's importers bring in goods from Marseilles and even Rotterdam. The decay of the port—said to be the only one in the world where dockers stop work when it rains—is a significant cause of the depression that has hit the rest of the city in recent years.

The new chairman appears determined to return control to the port authority, after 15 years in which it slipped gradually into union hands.

His decision to freeze charges was strongly contested by the unions, and the strike is widely seen as an attempt to block Sig d'Alessandro's plans to restructure the port.

In the van of the fight is the Communist oriented CGIL union. Its leaders in Genoa have accused Sig d'Alessandro of taking decisions instead of seeking compromise.

The CGIL is backed in the strike by the pro-Socialist UIL, despite condemnation of the action by that union's leadership in Rome.

East Germany clamps down on emigrants

BY LESLIE COLITT IN EAST BERLIN

EAST GERMANY has taken into custody dozens of its citizens who recently applied to leave the country for West Germany.

The detained East Germans face charges of "treasonable disloyalty" for having sought help from the West German Permanent Mission in East Berlin or from relatives in West Germany.

At least 50 East Germans were detained in Jena along with others in several East German cities, including East Berlin, in an apparent move to discourage further emigration applications.

Herr Wolf Quassdorf, an East Berlin theologian, was sentenced last week to 14 months in prison for "illegal contacts" with the West German Mission after he applied to emigrate.

More than 20,000 East Germans have arrived in West Germany since January when East Germany began approving exit applications at the fastest rate since the Berlin Wall was built in August, 1961.

An estimated 400,000 East Germans have applied to leave, but in recent weeks there has been a wave of new applications because of growing fears that the East German authorities will soon clamp down on departures.

The East German authorities have simultaneously stepped up their efforts to get members of the independent peace movement to apply to leave the country. Several campaigners were given prison sentences recently for holding silent vigils in East German cities.

The East German Government is thought to be permitting some of its dissatisfied citizens to leave in order to reduce pressure on it for political and economic change.

In addition, some of the emigrants worked in fields such as teaching where there is now excess manpower. West Germany is compensating East Germany monetarily for the higher education and job training each emigrant has received in East Germany.

WORLD TRADE NEWS

Occidental to sign $600m coal mine pact with China

BY CHRISTIAN TYLER, TRADE EDITOR

OCCIDENTAL PETROLEUM of the U.S. said it will on Sunday formally sign a $600m joint venture agreement with China to develop what will reputedly be the world's largest open-cast coal mine.

The signing, apparently timed to coincide with President Ronald Reagan's first visit to the People's Republic, marks the end of protracted negotiations which at one point were rumoured to be close to breakdown.

Dr Armand Hammer, chairman of Occidental, said in Los Angeles: "We have the financing in place and expect to be able to go ahead."

The deal is said to be the biggest ever between the Chinese and a foreign concern. It will underscore the political impetus in Washington and Peking for closer commercial relations which is expected to be a principal theme of Mr Reagan's visit.

Dr Hammer's announcement follows initial agreement earlier this month on a financial memorandum, a project agreement and a bridging loan.

The Bank of China in Peking has confirmed that it is underwriting the project and helping Occidental overcome "various problems" in arranging funds.

Occidental was thought earlier this year to be having difficulty in raising its estimated $360m share of the project and had asked the Chinese to cover exchange losses if the company took payment in exports of the coal at present low world prices.

The U.S. company's advisers are First National Bank of Chicago, First National Bank of Boston, and Bank of America.

The plan is to develop a 15m-tonne a year strip mine at Antaibao in the Pingshuo district of Shanxi province, about 500km west of Peking. Coal reserves are estimated at 1.4bn tonnes.

Dr Hammer said the coal would be sold for export—much of it is expected to go to Japan—and will be marketed by the Chinese.

About $250m of Occidental's share will be for mining equipment, the rest for engineering, management costs and bank interest. The U.S. Eximbank is expected to finance some of the equipment sales.

Dr Hammer and Occidental's president, Mr Robert Abboud, will fly to Peking for Sunday's ceremony.

Occidental and the China National Coal Development Corporation signed an interim agreement in March last year.

Construction was due to begin four months later with production starting in July next year. Since then there has been a fresh round of negotiations culminating in a banquet to celebrate the financial accord earlier this month.

Japan gives AT & T $49m minicomputer contract

TOKYO—Nippon Telegraph and Telephone Public Corporation (NTT) has signed contracts worth $51m (£36.4m) to buy U.S.-manufactured touch-tone telephones and super-minicomputers to be used for Japan's telephone traffic observation system.

Under a $49m contract signed in Tokyo with AT&T International Inc., NTT, Japan's domestic telecommunications monopoly, is to import by 1987 60 super-minicomputers developed recently by American Telephone and Telegraph Co (AT&T) of the U.S., Mr Ichio Kata, director-general of NTT's international procurement department, said.

The computers will monitor telephone traffic and control circuits.

AT&T International is AT&T's export arm. Mr Kata said NTT had also signed a contract to purchase 60,000 standard touch-tone telephones from Northern Telecom International Inc. of the U.S.

NTT was still negotiating with AT&T on the purchase of software for telephone traffic observation systems. With the purchases, NTT's purchases of U.S. manufactured equipment for the year ending last month will exceed the year's target of about Y30bn (£93m), he said.
AP-DJ

Australia seeks U.S. meat quota injunction

SYDNEY — The Australian Government has filed for an injunction against U.S. meat import restrictions which it says kept Australian exporters from shipping $18.5m (£13.1m) worth of meat to the U.S. in 1983.

The Australian Meat and Livestock Corp (AMLC), Australia's meat controlling body, said it had filed for the injunction in the U.S. Court of International Trade in New York to prevent the U.S. from negotiating agreements limiting all meat imports to less than 567,000 metric tonnes a year.

That figure, the AMLC said, is the minimum guaranteed by the U.S. Meat Import Act of 1979, but U.S. trade negotiators have insisted on limiting imports to the substantially lower "trigger level" of the Act.

In 1983, the Australians were limited to just over 272,000 tonnes—some 8,600 tonnes less than the AMLC says it should have been limited to by the floor level of the Act.

Mr Geoff Jones, AMLC chairman, said the same situation is developing in 1984, where the formula for the trigger level "set it below the floor level of the Act."
AP-DJ

Jakarta to buy second Hughes Corp. satellite

By Kieran Cooke in Jakarta

INDONESIA says it will sign a contract with Hughes Corporation of the U.S. on May 1 for a new telecommunications satellite to replace the Palapa B2 lost soon after launch from a Challenger space mission in early February.

Mr Ahmad Tahir, Indonesia's Minister of Telecommunications, said the new satellite is expected to be put into orbit in March 1986.

Hughes also built Palapa B2, at a cost of more than $70m.

AT & T data link-up

Japan's overseas telecommunications monopoly, Kokusai Denshin Denwar Co (KDD), plans soon to start a U.S.-Japan data communication service with a subsidiary of American Telephone and Telegraph Co (AT & T), is said yesterday. Reuter reports from Tokyo.

How India copes with copyright pirates

Singapore and Taiwan have taken legal action against book pirates but the unauthorised copy and distribution of books throughout Asia remains a serious problem. John Elliott in New Delhi examines how the battle is being waged in India

PAPERBACK editions of two popular novels—Harold Robbins's Xanadu and Jeffrey Archer's First Among Equals are to be printed and published in India in advance of publication of either hardback or paperback editions in the UK.

Like John Le Carre's Little Drummer Girl which was also available in advance in India, they will be sold at half to two-thirds of the likely UK price.

The sales are legal and are being made by agreement with UK publishers. They are part of a growing battle against book piracy at a time when rocketing prices and protectionist policies are making black market publishing a profitable, if risky, business.

India may take a lead among developing countries by introducing legislation later this year to make piracy an offence against which police can take action unilaterally, which is not possible at present.

The effectiveness of the law will depend, however, on how it is administered by a notoriously corrupt police force and what penalties are attached.

India's copyright laws are unable to deal with piracy, which now affects video films, music casettes, car spares and drugs as well as books. Simplified technology has also made reproduction easier in recent years.

When pirate educational books provide cheap learning or the counterfeiting of car spares brings employment and technical skills officials can often be benign in their attitude to those who break the law.

Pirate goods in India are produced often by the smallest concerns—it is known as the "tiny sector." The goods are cheap because they escape the excise duties of up to 30 per cent which are levied on licensed manufacturers, and the cost of development, recording and royalties.

Piracy is not, of course, confined to India. In Pakistan, book piracy is legal for texts loosely connected with education. In Taiwan and Singapore motor spares and books are copied. But the scale of the Indian market makes it potentially a more serious problem.

The Government has been forced to take action by the famous and politically powerful Indian film industry based in Bombay. Video counterfeiting has mushroomed in India in the past year and is endangering the future of the film industry. Thousands of middle class Indians who bought colour television sets for the Asian Games held in New Delhi 14 months ago later found they had little to watch because Indian television programmes are so poor.

The Government relaxed its tight controls on electrical imports and allowed video cassette players into the country, providing the basis for a huge underground video film business. By last spring there was as much concern in India as in the UK about video "nasties."

Sound recording has also been hit pushing EMI's Gramophone Company in India into its first loss last year for 99 years.

About 200 books were sold last year in pirated editions. A different, but related problem known as "infringement," where books are imported and sold ahead of publication is also causing concern, as is the production of fake books.

An example of this was Philip Agee's Inside the Company, which was repackaged as Discover Intelligence, by Robert Ludlum, who is more popular in India. A bogus Harold Robbins novel called The Lonely Lad has also been produced.

India is the world's third largest English language publishing country after the U.S. and the UK but piracy also extends to books in some of India's own languages including Hindi, Tamil and Malayalam.

West Bengal and Orissa are the centres of educational book piracy. The pirates use modern photographic and offset printing techniques, which make the reproduction of a book a cheap overnight task, economic to produce with runs of only 1,000 copies.

"Readers don't want to wait for books and also prices are often too high, so the pirates have met the demand," says Mr R. K. Mehra of Rupa, an Indian publisher which has fought back with teams of private detectives who hunt the printers and retailers and with legal action.

UK publishers have co-operated with Rupa and with other companies such as India Book House, which is publishing Xanadu and First Among Equals. By sending proofs or negatives or early hardback copies to be photographed and printed in India, they often succeed in beating the pirates by getting the books on to the Indian market before they can be copied.

The problem seems unlikely to be solved quickly, despite the promise of new legislation. Cheap editions of world best-sellers are likely to continue for some time to be a little-advertised but enjoyable bonus for the country's foreign tourists.

Babcock in boiler venture for N. American market

BY DAVID FISHLOCK, SCIENCE EDITOR

A JOINT venture between Babcock Power, boilermaking subsidiary of Babcock International, and Stone and Webster, the U.S. engineering group, to exploit the North American market for a novel type of fluidised combustion boiler, has been agreed between the two companies in London.

They will have equal shares in a Delaware-based company called Multifuel Boilers Inc. set up to exploit a fluidised-bed technology demonstrated by Stone and Webster, called the Solids Circulation Boiler.

Chairman and chief executive officer of Multifuel Boilers is Mr Warren Leland, a senior Stone and Webster executive. President and chief operating officer is Mr Ron Campbell, managing director of Babcock Power.

Mr Leland said yesterday that the company they were founding was, in his opinion, going to grow into "a very large company."

His optimism is founded in the belief that Stone and Webster has a simple but patented technology for burning poor quality fuels efficiently without releasing noxious emissions.

He estimates that the U.S. has about 250,000 boilers burning oil or gas ready to convert to coal if the technology can meet the government's emission standards.

Its new boiler burns coal in a "bubbling bed" of highly agitated spheres of alumina, to which limestone is added to absorb sulphur and keep it inside the boiler.

The output is controlled by regulating the air flow used to agitate the bed and circulate it past heat transfer surfaces.

According to Mr Leland, the boilers will be factory-built in modules assembled inside an enveloping shell, the minimise the amount of construction needed on site.

He believes the new company will be quoting for coal-fired power stations as big as 200 megawatts electrical output in two years.

If the system can be shown to meet emission standards, it will run on high-sulphur coals and petroleum coke costing only one-third to one-fifth as much as present-day boiler fuels in the U.S.

Mr Campbell said the two companies were complementary in experience.

Alsace steps up efforts to win U.S. investment

By David Marsh, recently in Strasbourg

THE Alsace region of Eastern France is stepping up efforts to attract U.S. investment at a time when Alsatian business leaders fear local jobs could suffer from preferential industrial aid being accorded to troubled steel centres in neighbouring Lorraine.

This week the Alsace Development Agency (ADA), the regional public sector business promotion agency, is sending a team to the west coast of the U.S. to explore contacts with about 80 or 90 companies which are candidates to set up in Alsace.

The region, next to the German and Swiss borders, is traditionally one of France's most prosperous business areas, specialising in the metalworking, textiles, engineering and chemicals fields.

The decision to opt for direct representation abroad was prompted partly by the growing tendency of Datar, the French national business development agency, to concentrate efforts to attract foreign companies to France's depressed regions hit by closures in traditional manufacturing industries.

West Germany hopes for Seoul submarines order

BY RUPERT CORNWELL IN BONN

WEST GERMANY is hoping to extend its inroads into the South Korean defence market by winning an order for two submarines, worth an initial DM 400m (£106m) from the Seoul Government.

The deal is by no means assured, as the German yard that would build the submarines, Howaldtswerke Deutsche Werft AG, is facing competition from France for the order.

But last week, Count Otto Lambsdorff, the Economics Minister who has just visited Seoul, confirmed in Tokyo that should HDW secure the contract, the Bonn Government would have no hesitation in granting an export licence.

Meanwhile representatives of German companies involved in the negotiations are understood to have recently visited South Korea.

In addition to the direct purchase of the two submarines, Seoul is believed here to be interested in building up to a further 12 under licence.

South an outcome would represent not only a boost for the crisis-battered West German shipbuilding industry, but would further underline the importance of South Korea as a customer for Western arms manufacturers.

Last autumn, the Munich-based Motoren- und Turbinen-Union (MTU) won a DM 400m order to supply South Korea with modified engines of the Leopard II battletank for a new U.S.-developed tank destined for service with the South Korean army.

Reuter adds from Seoul: Sir Geoffrey Howe, Britain's Foreign Secretary, yesterday visited a South Korean steel company which recently awarded a £28.5m contract to Davy McKee Corporation, British Embassy officials said.

Britain is trying to adjust a trade imbalance which is running at more than two to one in South Korea's favour and which is causing some friction between the two countries.

South Korean exports to Britain totalled more than $1bn in 1983 while British exports to South Korea were $468m.

Pohang Iron and Steel Company, owner of the steel mill in South-East Korea, awarded the contract to Davy McKee to provide a blast furnace for its second steel mill at Kang Yang Bay.

AMERICAN NEWS

Argentine Labour Minister resigns

By Jimmy Burns in Buenos Aires

A SIGNIFICANT U-turn in the Argentine Government's attitude towards the unions appeared to be confirmed yesterday with the long-expected resignation of Sr Antonio Mucci, the controversial Labour Minister.

Sr Mucci's political influence had been gradually eroded after being identified as one of the main architects of a Government Bill aimed at reforming the General Confederation of Labour (CGT)—the country's only major trade union organisation. The Bill was defeated last month in the face of strong opposition from trade union leaders and the parliamentary Peronist party.

President Raul Alfonsin now has his hands free to pursue a more conciliatory approach to trade union affairs in an attempt to secure a "social contract" with both sides of industry. Trade union reform was one of the key issues of his electoral campaign, but Sr Alfonsin has more recently been worried that the controversy generated by the Labour Bill was undermining any chance of securing broad political support for the Government's economic programme.

The new Labour Minister is Sr Juan Manuel Casella, a 42-year-old lawyer. Sr Casella has no previous ministerial experience but he has a reputation as a skilful political negotiator. As head of the Parliamentary Defence Committee Sr Casella earlier this year secured Peronist support for a military reform Bill, allowing for the court martial of officers involved in human rights violations.

Rivalries within the labour movement were made more acute, as a result of Sr Mucci's reform plans and are thought to have been behind recent wildcat strikes in favour of wage increases.

Significantly, Sr Casella's appointment follows a series of meetings over the last two weeks between Sr Alfonsin and leaders of the CGT.

More American news, Page 9

Reagan set to sign nuclear agreement during China visit

BY REGINALD DALE, U.S. EDITOR IN WASHINGTON

THE U.S. and China have completed negotiations for a nuclear co-operation agreement, which should be ready for signature by President Ronald Reagan during his six-day visit to China that begins on Thursday, U.S. officials said yesterday.

This agreement, which would allow U.S. companies to participate in China's ambitious nuclear energy programme, has long been regarded by Washington as potentially the most significant concrete achievement of Mr Reagan's trip, his first ever to a Communist country. It is expected to open the door for billions of dollars worth of sales by U.S. suppliers of nuclear equipment and technology.

U.S. officials in the presidential party, which was yesterday touring the Pacific en route to Peking, were reluctant to pre-empt Mr Reagan by revealing details of the agreement. They said, however, that the latest round of talks in Peking had now been completed and the accord was "all but signed and sealed."

Mr Reagan yesterday took up the broader theme of his visit on his departure from Honolulu for the U.S. dependency of Guam. The U.S., China and other Pacific countries could together "go forward in a mighty enterprise to build dynamic growth economies and make the world safer, by working for peace and jointly opposing expansionist aggression," he said. "That is what our trip to China is all about."

Leslie Colitt in Berlin writes: On the eve of President Reagan's visit to China, the Soviet Union has stepped up its criticism of Peking for its "military and economic co-operation" with the U.S.

A wide-ranging commentary by Tass the Soviet News Agency, said China and the U.S. have virtually identical views on the "militarisation of Japan." Further points of contact between Peking and Washington, it said, were the numerous statements by the Chinese leadership against Afghanistan, Kampuchea and Vietnam.

Tass said the recent "anti-Soviet" statements by Peking, which refused to condemn America's "militaristic policy," had not gone unnoticed by the Reagan Administration. The White House and China, it noted, agreed the Taiwan question was to be relegated to the background during President Reagan's visit, along with everything else which divided the U.S. and China.

The Soviet news agency said the U.S. was trying to penetrate China economically through capital investments and the sale of technology for weapons production. Washington, it claimed, was attempting to gain the greatest possible "domination" of the Chinese economy. For its part, China was using American capital, as well as capital from other "imperialist" countries, such as Japan, to develop certain areas of its economy.

Jackson holds out an olive branch

By Our U.S. Editor in Washington

THE Rev Jesse Jackson, long a supporter of the olive branch in international confrontations, has offered a peace gesture to head off a potentially damaging election year feud inside the U.S. Democratic Party.

Mr Jackson, the third-placed Democratic presidential candidate, has pledged that his delegates will not walk out of July's national convention in San Francisco if he does not win changes in party rules that he maintains discriminate against black voters and candidates.

In return, Mr Charles Manatt, the party chairman, is to try to persuade state party officials to take Mr Jackson's strong showing at the polls into account when they select convention delegates not already committed to other candidates.

The party leadership is also tto consider other issues raised by Mr Jackson in the hope of ensuring that he will work actively to bring out the black vote in November's presidential election.

Senator Gary Hart of Colorado, on the other hand, *has gone* on to the warparth with his toughest attack yet on former Vice-President Walter Mondale, his main rival for the nomination. Mr Mondale was a "failed" leader, "in debt" to organised labour and other special interests, whose "backward" vision would be rejected by voters in November, Mr Hart said in Texas, where he is hoping to revive his flagging campaign in the May 5 state caucuses—the next major test in the nomination battle.

Mini float glass plant technique launched

BY TERRY DODSWORTH IN NEW YORK

A NEW technique of making float glass in mini-sized plants ideal for third world markets is being launched by AFG, a rapidly-expanding U.S. company based in Tennessee.

AFG claims that glass made in the mini-plants, adapted from the revolutionary glass-making technology developed by Pilkington of the UK, costs roughly the same to produce as the products of a much larger facility.

The plants are therefore suitable for smaller markets where investment in a larger unit could not be justified, and where out-dated facilities may have been maintained in operation to save foreign currency on imports.

Announcing the new development in New York, Mr Dee Hubbard, chairman, said that agreement had been reached with Pilkington over the patents which are still open on the UK company's float technology.

Although the prototype mini plant in Tennessee has still to be completed, Mr Hubbard said that AFG is already talking to around 10 countries about the development.

The average float glass plant, in which molten glass floats on a layer of molten tin, has an economic production level of 500 to 650 tons a day. The AFG mini-float system is effective at around 120 tons a day, and would cost between $35m and $50m to build.


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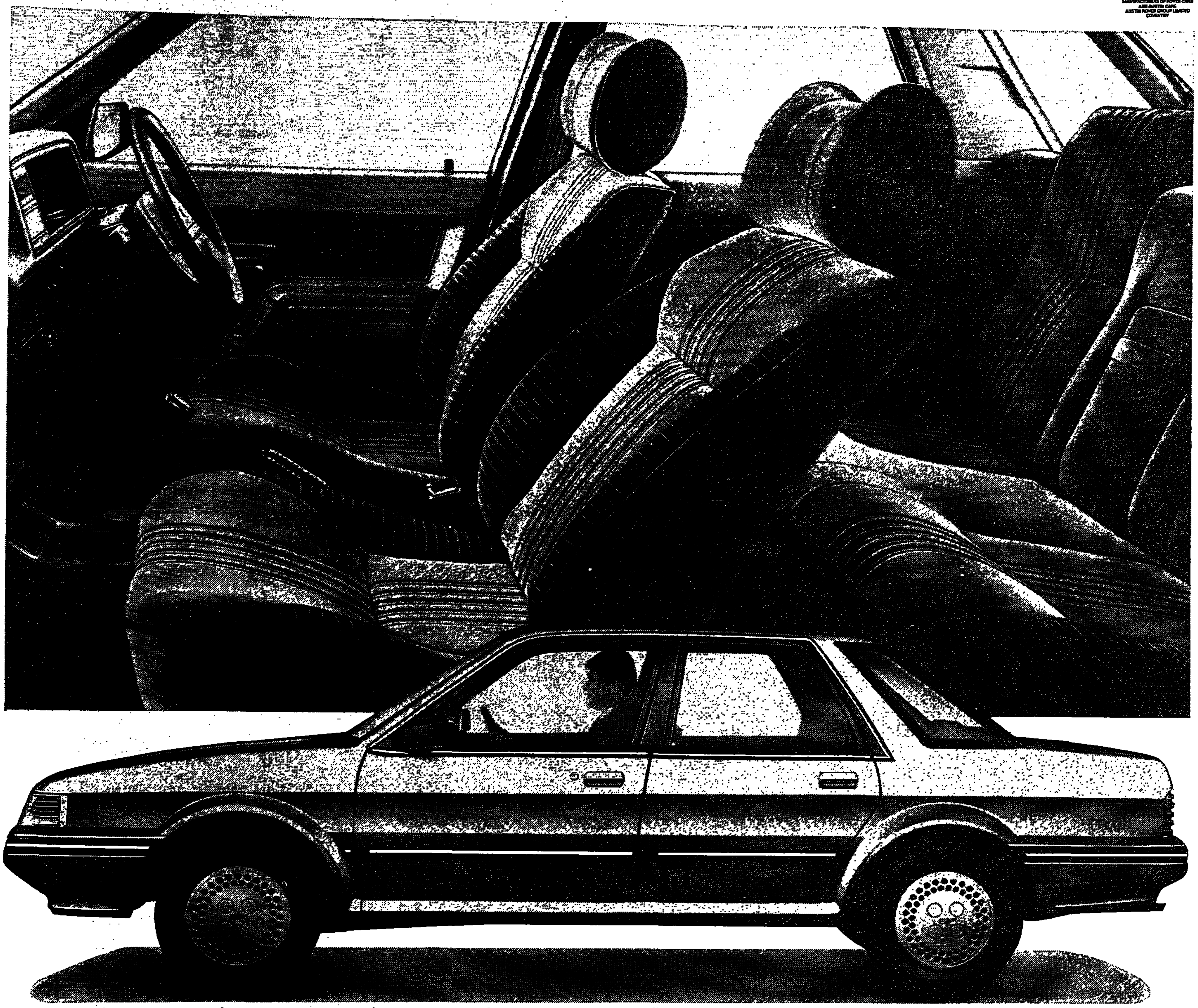

You're looking at an inspired creation. The new Austin Montego.

A beautiful car, whose inspiration has been drawn from the needs, wants and aspirations of a very special group of people. Today's drivers.

By listening and talking to those drivers, Austin Rover has delivered the car they asked for. Montego is bigger, better equipped, faster, more economical and more stylish than today's driver is used to.

The Austin Montego: the more you read about it, the more you'll like it. After all, it was designed for you, the driver.

PASSENGERS TRAVEL FIRST CLASS TOO.

Passengers experiencing the Montego will find their every wish fulfilled.

Generous fitted carpet is complemented by ducted heating for rear seat passengers. The deeply upholstered front seats recline, and are fitted with head restraints as standard.

In the rear of the Montego HL the folding centre armrest and integral rear seat head restraints put comfort first.

Austin's much imitated split rear seat action takes on a new role in Montego. When folded, the seat backs offer the choice of a picnic tray, or a large writing surface, as well as increasing Montego's outstanding loadspace.[1]

PUTTING ECONOMY AND PERFORMANCE EQUAL FIRST.

Austin Rover's new technology is shown to powerful effect in Montego's combined economy and performance.

The Montego 1.3, with the optional five-speed transmission, is capable of a staggering 58.3 mpg at 56 mph. Taking the 1.6L as an example, a top speed of 102 mph[2] comes as easily as an incredible 53.3 mpg at a steady 56 mph.

The same is true of the 2.0 HL, propelling the driver from 0–60 mph in 9.8 seconds[2] and yet still delivering over 50 mpg at 56 mph.

Part of this achievement is due to Austin Rover's proven Electronic Engine Management system. A microprocessor controls fuel usage through a highly sophisticated automatic choke system, idle speed control and deceleration fuel cut-off. On 1.6 and 2.0 litre models, new programmed ignition brings state of the art performance to Austin's advanced engine range.

Montego's beautiful shape plays an important part in performance and economy. The flush fitting front and rear screens, and integrated body-colour bumpers help aid aerodynamic efficiency, whilst adding further style.

Today's driver wants better visibility, more interior space, more legroom and more loadspace.

The Austin Montego satisfies all four requirements within an elegant shape.

TD WHEELS AND TYRES. ANOTHER FIRST FOR MONTEGO.

The Montego is one of the first production four door saloons to be fitted with a new concept in wheel and tyre technology. Special rims are fitted with low profile TD tyres, designed to remain in position even after a sudden loss of pressure.

And on the road, the TD combination, front wheel drive and Montego's advanced suspension system give a quality of ride, handling and control unsurpassed in its class.

Montego offers a range of power units from 1.3 to 2.0 litre, including an all-new low weight 1.6 litre engine. All are equipped to cover 12,000 miles between services.[3] Optional 5-speed transmission becomes standard on L models upwards; automatic is available on 1.6 litre models.

SOME PUT LUXURY FIRST. OTHERS WANT PERFORMANCE.

The prestigious Vanden Plas heads the Montego range in luxury, while the 2 litre electronic fuel injection MG EFi delivers the ultimate in performance and handling.

Every Montego comes with the benefits of Austin Rover's free 6 year corrosion warranty and first year full warranty, extendable for the second and third years.

Test drive one of the Montego range at your Austin Rover dealer. You'll see why it's the car that puts the driver first.

AUSTIN MONTEGO

FROM £5,282.

DRIVING IS BELIEVING.

[1] HL models upwards. [2] Manufacturer's data. [3] Or one full year, whichever comes first. DOT figs Montego 1.3 5 speed: Simulated Urban Cycle 36.3 mpg/7.8 L per 100 km. Constant 56 mph 58.3 mpg/4.8 L per 100 km. Constant 75 mph 41.5 mpg/6.8 L per 100 km. 2.0 HL: Simulated Urban Cycle 30.8 mpg/9.2 L per 100 km. Constant 56 mph 50.4 mpg/5.6 L per 100 km. Constant 75 mph 37.3 mpg/7.6 L per 100 km. 1.6 L Simulated Urban Cycle 31.9 mpg/8.9 L per 100 km. Constant 56 mph 53.3 mpg/5.3 L per 100 km. Constant 75 mph 38.8 mpg/7.3 L per 100 km. Price quoted is for Montego 1.3 4 speed. Model shown 2.0 HLS at £7,585, excluding number plates and delivery, correct at time of going to press. Metallic paint optional at extra cost.

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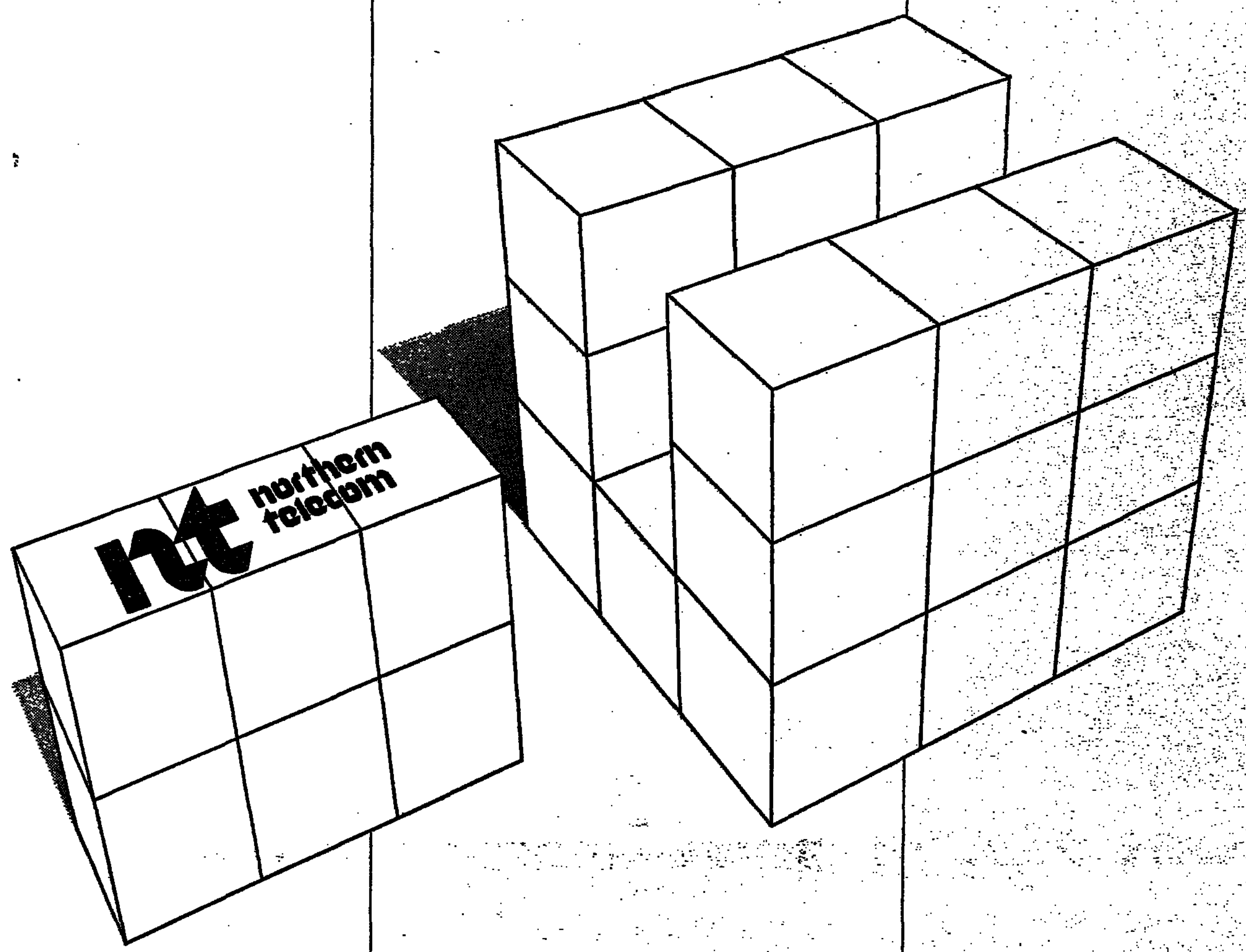

In 1976, Northern Telecom announced the Digital World,* changing the course of world telecommunications development. It committed the company to being the first to produce a complete family of **fully** digital switching and transmission systems.

Digital World made obsolete the analogue telecommunications equipment being produced by other manufacturers. In time, and in turn, they followed the Northern Telecom lead. And, they are still following.

Digital World revolutionized the concepts and practices of communications and information management and accelerated the merging of the telecommunications, computer, and data-processing industries. It made possible the future of effective information-management.

WORLD LEADERSHIP IN DIGITAL TECHNOLOGY

Northern Telecom today is the world's largest manufacturer of fully digital systems and services. It has in service, or on order, the equivalent of some 16 million lines of fully digital switching and transmission systems—more than any other company. Northern Telecom is a leader in the development and manufacture of computers and custom large-scale integrated circuits for telecommunications.

It has one of the most proven records in the development of successful and innovative telecommunications software.

UNMATCHED GLOBAL SUCCESS

In the United States, the world's largest and most competitive national market, Northern Telecom's DMS* (Digital Multiplex Systems) Family of digital central office switches has been sold to, or is in service with, 21 of the 22 U.S. Bell operating companies and all other major telephone companies.

Northern Telecom is the largest supplier of digital telecommunications systems to the U.S. military. It is a principal source of such equipment for the U.S. specialized and resale common carriers, governments, private corporations, and major institutions, such as universities and hospitals.

It was the first telecommunications equipment manufacturer to introduce integrated voice and data capability with its family of SL* digital PBXs. The SL Family ranges from 30 lines to 30,000 lines and includes the largest digital PBX available. The SL-1 is in use in 45 countries.

Financial and telecommunications organisations around the world are using the Northern Telecom SL-10 data packet switch. The U.S. Federal Reserve System handles fund transfers of more than US$100 trillion a year on its 14-node SL-10 system. SL-10 is used by the West German Bundespost, and in the United Kingdom, Canada, the U.S., Hong Kong, Switzerland, Portugal, Belgium, Austria, and the Republic of Ireland.

In the data-processing field, Northern Telecom systems are in use in North America and throughout Europe. More than 3,500 systems, worth £45 million, have been exported from England to Europe during the last 5 years. The Displayphone* terminal was the world's first combination telephone and computer terminal.

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Northern Telecom's technological and market leadership is based on a long-term commitment to market-driven research and development, which has already produced a decade of telecommunications firsts. Northern Telecom is presently investing nearly 10 percent of total worldwide revenues in R&D each year.

A major portion of future R&D expenditures will be devoted to products and systems for the OPEN World* programme announced in 1982. An acronym for Open Protocol Enhanced Networks, OPEN World is the company's mandate to bring order out of information-management chaos.

As one element of the OPEN World, Northern Telecom is making available to other manufacturers of data-processing and computing equipment the proprietary protocols to its switching systems. This will permit a great variety of information management equipment and products to work together in a single system.

Northern Telecom's 39,000 employees are based throughout the world in sales and services offices, 37 research and development centres, and 46 manufacturing plants.

With them, and through them, Northern Telecom continues to lead the industry and build the global telecommunications systems of the future.

For more information on Northern Telecom and its products contact: Northern Telecom plc., Berkeley Square House, Berkeley Square, London W1X 5LE. Telephone: 01-491 4599.

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Hong Kong markets fall but react with relative calm

BY ROBERT COTTRELL IN HONG KONG

HONG KONG'S financial markets were relatively calm yesterday, their first trading day since Friday's announcement that Britain will cease administering the Colony in 1997, when the UK's lease from China on most of the territory expires.

The stock market's Hang Seng index dropped sharply in the morning, but trading was thin with most institutions staying out of the market. In the afternoon, a mild recovery saw the index close at 1,070.02, down 45.83 points on the day but almost 9 points off its lunchtime low.

The Hong Kong dollar stayed close to its nominal peg of $7.80 to the U.S. dollar. It was trading yesterday afternoon at $7.81, just a half-cent weaker on the day.

While the stock market's fall represents the wiping off of 4 per cent from share values, Hong Kong investors reacted considerably more sharply in the past two years to considerably less momentous news.

The announcement that Britain would cease administering Hong Kong was made by Sir Geoffrey Howe, the British Foreign Secretary, on Friday morning, the first day of the Easter holiday weekend. Officials believe this weekend "buffer" helped steady the market's nerves.

Most analysts said that Sir Geoffrey's statement was predictable and widely discounted. Communist commentators praised the Foreign Secretary's "realism."

● Hong Kong Government sources say a statement is likely in late summer about plans to make Hong Kong's system of government more "representative"—a process which Sir Geoffrey said would begin during the remaining years of British administration.

Democracy is likely to be extended to higher levels of the administrative machinery. At present, it exists only for the election of local advisory bodies, and as such arouses little enthusiasm among prospective voters.

A move towards more democratic government will involve the gradual dismantling of the system of British-appointed administrators which is now set out in Hong Kong's royal instructions and letters patent, the documents which serve as the territory's "constitution."

● Hong Kong plans to give quasi-diplomatic status to senior representatives of Peking in the territory. For political reasons, Peking representatives in Hong Kong are not formally regarded as diplomats — Peking disputes the legality of Britain's present claim to Hong Kong.

Hong Kong is expected to enact legislation soon giving Chinese representatives, including Xu Jiatun, head of the Hong Kong branch of the New China News Agency, privileges and immunities parallelling those of the Vienna Convention, the international agreement which covers bona fide diplomats.

Offer of arbitration in Sikh dispute

By K. K. Sharma in New Delhi

THE Indian Home Minister, Mr P. C. Sethi, yesterday offered to refer the river waters dispute in the violence-racked state of Punjab to a tribunal for arbitration but made this contingent on an overall settlement of the Sikh demands.

Mr Sethi made the offer while replying to a debate in the upper house of Parliament. The river waters dispute is one of the main issues over which the Sikhs are agitating and the Government has hesitated so far to make any commitment on it as the interests of adjacent states are involved.

The Government has now made a gesture but it remains to be seen how far this is taken by the Sikhs' Akali Party, as the party is being pressured by the extremists to reject any negotiations with the Government.

Mr Sethi again asked for a negotiated settlement of the Punjab tangle but made it clear that the Government would never accept the demand for Khalistan, the separate Sikh homeland sought by the extremists.

● There was trouble again in the northe-eastern flank of India when paramilitary forces of Bangladesh and India exchanged fire across the border for the second time in less than a week.

An Indian spokesman said intermittent firing continued all day and that three Indian security men were injured. The firing is said to have been started by Bangladesh rifles personnel to prevent Indian workers from erecting a fence along the border.

The fence is being built all along the Indo-Bangladesh border by India at a cost of £357m to check illegal immigration into Assam.

Sadat associates dropped from Mubarak party lists

BY CHARLES RICHARDS IN CAIRO

PRESIDENT Hosni Mubarak of Egypt has continued the gradual process of change within his National Democratic Party by dropping some of the leading personalities of the Sadat era from the party lists to contest the parliamentary election on May 27.

As party chairman, he personally took charge of vetting the lists in the 48 electoral districts to give younger candidates a chance.

Twenty-five members of the People's Assembly are excluded, including 11 former ministers, most dropped in Cabinet reshuffles earlier during Mr Mubarab's two-and-a-half-year presidency.

They include the former prime minister, Dr Mustapha Khalil, who retains a senior party post, the former speakers of the People's Assembly, Dr Sufi Abu Taleb and Sayed Marei—the latter related by marriage to the Sadat family—a former deputy prime minister, Fikri Makram Obeid, and the unpopular former interior minister, Nabawi Ismail.

It is not clear how many, like the promising former Information Minister Mansour Hassan, chose not to stand and how many were weeded out by the president.

The Minister for Parliamentary Affairs, Muhammad Rashwan, does not appear in the lists. He has been seen by the opposition as being against the extension of democratic freedoms in Egypt.

To counter this clearing process, a number of senior personalities closely associated with the late president and his policies, including the Prime Minister, Dr Fuuad Moheiddin, and the multi-millionaire buseinessman Osman Ahmed Osman, are prominent on the lists.

All the five parties contesting the elections had 10 days in which to declare their lists, but waited until the last minute before doing so

Under Egypt's new electoral system, a modified form of proportional representation, prospective candidates have to belong to a party.

The NDP lists do include a number of ministers for the first time. Under the Egyptian system of government, ministers may be appointed from outside parliament although they are answerable to it, and many are contesting the elections for the first time.

Six killed as food riots strike Santo Domingo

SIX PEOPLE, one of them a policeman, were killed in Santo Domingo on Monday when security forces fired at rioters looting supermarkets in a protest against rising food prices in the Dominican Republic, police said.

They said the six died as police and troops fired into crowds which had sacked and burned four supermarkets in the capital. Dozens of smaller stores were also looted.

Troops were called in to reinforce police and more than 300 people were arrested, police said. Most shops in the capital and other large cities closed as word spread of the violent protests -- the worst seen in this Caribbean nation in 10 years.

The protests came less than a week after the Government increased prices of some basic foodstuffs by 50 per cent to comply with terms set by the International Monetary Fund (IMF) for renewal of a $450m loan.

The Government of President Salvador Jorge Blanco made no immediate comment on the rioting, which came as an IMF team was negotiating details of the loan sought by the Dominican Republic to help ease a $2.6bn external debt.

Reuter

Fresh strike threat by Bolivian trade unions

BY HUGH O'SHAUGHNESSY

THE BOLIVIAN COB trade union confederation is threatening to call its members out on a general strike tonight in protest against the austerity measures decreed earlier this month by President Hernan Siles Zuazo. The measures included rises in the prices of staple foods, petrol and transport which range from 110 to 600 per cent.

The strike, which was originally called for Monday, was suspended amid rumours of a military coup. A garrison at Roboré in the remote eastern area of Bolivia was reported to have risen against the Government on Monday but the insurgents appear not to have been backed by any other military units.

Meanwhile a consignment of 2,000 French machine pistols is under military guard at the airport at Santa Cruz. The 148 packing cases, labelled "food," were destined for the Bolivian police but General Arnoldo Pinto, head of the fifth division in the city, has demanded that the arms be turned over to the armed forces.

An emergency meeting of the international financial institutions is being called in Washington this month to seek $200m in emergency financial aid for the Siles Government to tide it over until a formal stand-by arrangement with the International Monetary Fund can be agreed.

Iraq minister visits Moscow

By Richard Johns

A RESCHEDULING of payments for Iraq's weapons purchases from the Soviet Union is believed to be the main purpose of a visit to Moscow by Mr Taha Yassin Ramadan, First Deputy Prime Minister.

On his departure from Baghdad yesterday Mr Ramadan was quoted by the official Iraqi news agency as saying the visit was aimed at improving and expanding bilateral relations.

Iraq has received substantial deliveries of arms including T-72 tanks and Skud B ground-to-ground missiles as a result of the rapprochement begun at the end of 1982 and consolidated last November by the visit to Moscow of Mr Tareq Aziz, Iraq's Foreign Minister.

Quarrel splinters Beirut peace

By Nora Boustany in Beirut

A MULTI-FACTIONAL security committee met yesterday in a bid to resolve a quarrel over the boundaries of deployment of a 1,500-man buffer force policing neutral zones between combatants.

A dispute over who should remain in the Primo-Sodeco axis straddling the demarcation line separating East and West Beirut led to artillery and rocket propelled grenade exchanges on Easter Monday, killing one Lebanese gendarme.

The violence killed three other people and wounded many others. The Christian militias of the Lebanese forces and Lebanese Army regulars fighting on the eastern side of the mid-city Green Line refused to vacate their Primo-Sodeco after they had agreed to do so.

Call for inquiry into killings

TEL AVIV – Israeli newspapers, joined by two opposition politicians, renewed their demands yesterday that authorities reveal how two Palestinian bus hijackers were killed earlier this month.

Official reports of the commando operation on April 13 that freed more than two dozen hostages aboard an inter-city bus say two of the terrorists were killed immediately when the bus was stormed while the two others were wounded and died later.

But photographers on the scene took pictures of at least one handcuffed man, who did not appear injured, being led away from the bus after it was stormed.

Journalists later showed one of the photographs in the Gaza Strip to friends and family of one of the hijackers, who identified him AP

Inquiry plea after Kenya 'massacre'

NAIROBI—A leader of the Degodia tribe appealed yesterday for an international commission to probe allegations that Kenyan security forces killed an estimated 900 Degodia tribes people last February.

Mr A. S. Khalif, a former member of parliament from the district of Wajir West in north-eastern Kenya, near the Somali border, made the appeal in a statement distributed to journalists in Nairobi.

Mr Khalif urged that an international commission be set up: "To probe the Wagala holocaust in order that the truth about Wagala shall be established." Wagala, about nine miles from the remote trading centre of Wajir, was the scene of the alleged massacre.

The Kenya Government has denied charges by leaders of the Degodia, a small tribe of ethnic Somalis, that up to 900 tribes people were killed around Wagala when security forces were sent to quell fighting between the Degodia and Ajuran tribes over grazing and water rights in February. Mr Justus Ole Tipis, Minister of State in the office of President Daniel Arap Moi, issued a detailed rebuttal of the charges in parliament on April 12.

Mr Tipis asserted that only 57 people were killed in the security forces action.

Police backing for Malay party meeting

By Wong Sulong in Kuala Lumpur

THE month-long crisis within Malaysia's largest Chinese political party, the Malaysian Chinese Association, is moving towards a showdown following police approval for a party's extraordinary general meeting to be held on Sunday.

The police approval is of crucial importance to the dissident group trying to topple the present party leadership, as it indicates that the Malay leaders are remaining neutral in the association's power struggle.

In another development on Monday, the former association president, Datuk Lee San Choon, publicly threw in his support for the dissident group when he urged all association delegates to attend the meeting.

The crisis started last month when Neo Yee Pan, who took over from Datuk Lee as acting president last May, expelled his rival, Tan Koon Swan and 13 of his supporters for alleged breach of party discipline.

The association has been a partner in the Malaysian government for the past 27 years and has four cabinet ministers, including Neo, who holds the transport portfolio. The crisis has dampened the Malaysian and Singapore stock exchanges.

ADB studies Indian loans request

By Peter Montagnon in Amsterdam

INDIA'S application to borrow from the Asian Development Bank is likely to be one of the most important talking points at this year's annual meeting which opens here today, Mr H. Onno Ruding, Dutch Finance Minister, said yesterday.

Mr Ruding, who is to chair the three-day meeting, told a Press conference that although no decisions have yet been taken on the amount and timing of Indian loans, they could be "very important to the bank because of the size of the country."

Coupled with the potential admission of China to membership of the bank, large scale borrowing by India could radically increase the size of its operations. Last year the ADB approved loans of $1.89bn (£1.35bn), making it relatively small by regional development bank standards.

India has not borrowed from the bank before but is now seeking finance because of an expected shortfall in loans from other sources, notably the International Development Association (IDA), Mr Ruding said.

UK NEWS

Scargill rejects talks on phased pit closures

BY OUR INDUSTRIAL STAFF

MINERS' UNION leaders made clear yesterday that they would not be entering into any talks on a revised timetable for pit closures. In doing so they ruled out hope of an early break in the deadlock in the dispute over pay and pit closures, which is now in its seventh week.

Mr Ian MacGregor, chairman of the National Coal Board (NCB) offered what appeared to be the first signs of concession when he told two mine management unions at a coal industry committee meeting that he was prepared to consider phasing his programme of cuts over a longer period than originally specified. The NCB had demanded 20,000 redundancies and the loss of some 4m tonnes of capacity over 12 months.

Mr Arthur Scargill, president of the National Union of Mineworkers (NUM) said yesterday, however, that he would not be present at a meeting today of the industry's consultative council when a revised timetable is expected to be discussed.

"The union is not prepared to discuss any reduction in manpower or pit closures. We are interested in expanding the industry, not contracting it," he said.

The union leadership received a setback yesterday in its attempt to intensify strikes in the coalfields. In the Nottinghamshire coalfield, miners at seven pits went to work in spite of their union's national conference decision to call all members out on strike.

There was heavy picketing of pits and police reported some arrests.

A threat to production at the huge Ravenscraig steel works in central Scotland was lifted yesterday when dockers agreed to unload vital supplies of coal on the Clyde from a British-registered ship. At the weekend, dockers supporting the miners refused to unload American coal from a Liberian-registered ship.

Mr Neil Kinnock, the Labour leader, yesterday attacked the Government for its role in the coal dispute and called for a reappraisal of the industry's future, Margaret van Hattem writes.

Speaking at a by-election rally in Wales, Mr Kinnock accused Mr MacGregor of "negotiation by newspaper." If reports of his willingness to slow down the programme of pit closures were justified, they were welcome, he said. But "false hopes, winks and nudges" would only embitter and prolong the dispute by injecting extra distrust.

Centimetre passes its screen test

By Guy de Jonquieres

ONE OF the last bastions of Britain's measurement system is about to fall. Under pressure from the law, international harmonisation and technological progress, the inch is soon to be replaced by the centimetre as the standard measure of television screen sizes.

The change, after legal action by UK trading standards authorities, is intended to provide a more accurate description of the diagonal dimensions of television screens. But plans for its introduction are so complicated that some in the industry fear that it will confuse the public.

Televisions will soon be relabelled with measurements in inches and centimetres. While the inch measurement will refer to the overall tube size, the centimetre figure will describe the visible picture, which is usually about 1½ inches (3.8 cm) smaller.

The dual system is expected to last for some years, but it will not apply to a new generation of television sets due to go on sale in the next 12 months, whose screen sizes will be measured only in centimetres. The new sets, which are expected to cost 10–20 per cent more than existing models, will contain a so-called Flat Squared Tube, which will provide a fuller picture with less glare. It is also said by makers to be more attractive to look at when the television is switched off.

Just to complicate matters further, the Flat Square Tube will be neither flat nor square. Its screen will still bulge – although by less than an ordinary tube – and will have the same rectangular shape.

It was prompted by two recent developments. First, trading standards officers have cracked down on the industry's practice of giving the size of a television's tube rather than its visible picture area. They say it violates the Trade Descriptions Act. Second, television tube makers have an international agreement to adopt the diagonal visible picture as the standard measurement of screen size.

Observer deal hinges on 100% control

Financial Times Reporter

MR ROBERT MAXWELL, chairman of British Printing & Communications Corporation, said yesterday that he was interested in buying the Observer newspaper only if he could secure 100 per cent ownership. He spelled out his terms to Mr Roland "Tiny" Rowland, head of Lonrho, the Pan-African trading group which owns the Sunday paper, when the two men discussed a possible deal over breakfast at Claridges, the London hotel.

Mr Maxwell's insistence on total ownership could delay or even prevent a deal being struck. Lonrho owns 80 per cent of the Observer while the balance is held by the paper's former owners, Atlantic Richfield of the U.S.

"Tiny indicated that he is prepared to sell, but we haven't come up with a deal," Mr Maxwell said after the talks ended.

The offer to sell follows Mr Rowland's public dispute with the Observer's editor over a story he wrote about alleged atrocities in Matabeleland, Zimbabwe. Lonrho has extensive interests in Zimbabwe.

Public spending view damaging, says TUC

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

THE GOVERNMENT'S Green Paper discussion document on the future of public spending, issued at the time of the budget, was condemned by the Trades Union Congress (TUC) yesterday as being misconceived and damaging to Britain.

The TUC said the strategy outlined implied substantial cuts in public services other than defence: "The consequences in terms of poverty, inequality and the undermining of essential services would be appalling." It said such policies would create a society to which the description "private affluence and public squalor" would properly be applied.

The Green Paper suggested that after adjusting for inflation, public spending would need to remain roughly unchanged over the next 10 years, if the Government were to succeed in its strategy of cutting public borrowing and tax rates.

However, the TUC argued that a balanced expansion of public spending, by reducing unemployment and increasing the number of taxpayers, would avoid a massive increase in the tax burden.

It rejected the argument that an increase in public spending would take away national resources from private enterprise. While it said there had to be a limit to the amount of public spending, there was at present no shortage of labour or of plant and equipment.

It added that the restraints on public spending stemming from the Government's medium-term financial strategy were artificial and self-imposed, while the Green Paper failed to provide any analysis of the way in which public spending "can play and has played in the pursuit of economic and social goals."

The TUC said there would be strong demands for increased spending if progress were to be made in alleviating poverty.

It said the Green Paper showed that public spending rose as a proportion of national output over the last 20 years, but it believed the trend had been continuing for much longer.

In the 1940s it was argued that public spending of more than 25 per cent of gross domestic product would spell ruin. However, the present proportion was more than 40 per cent.

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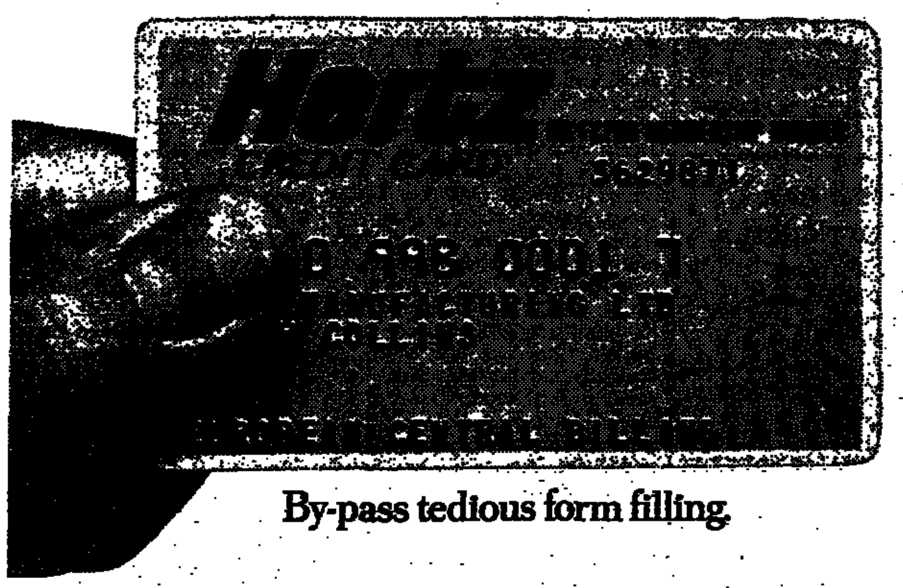

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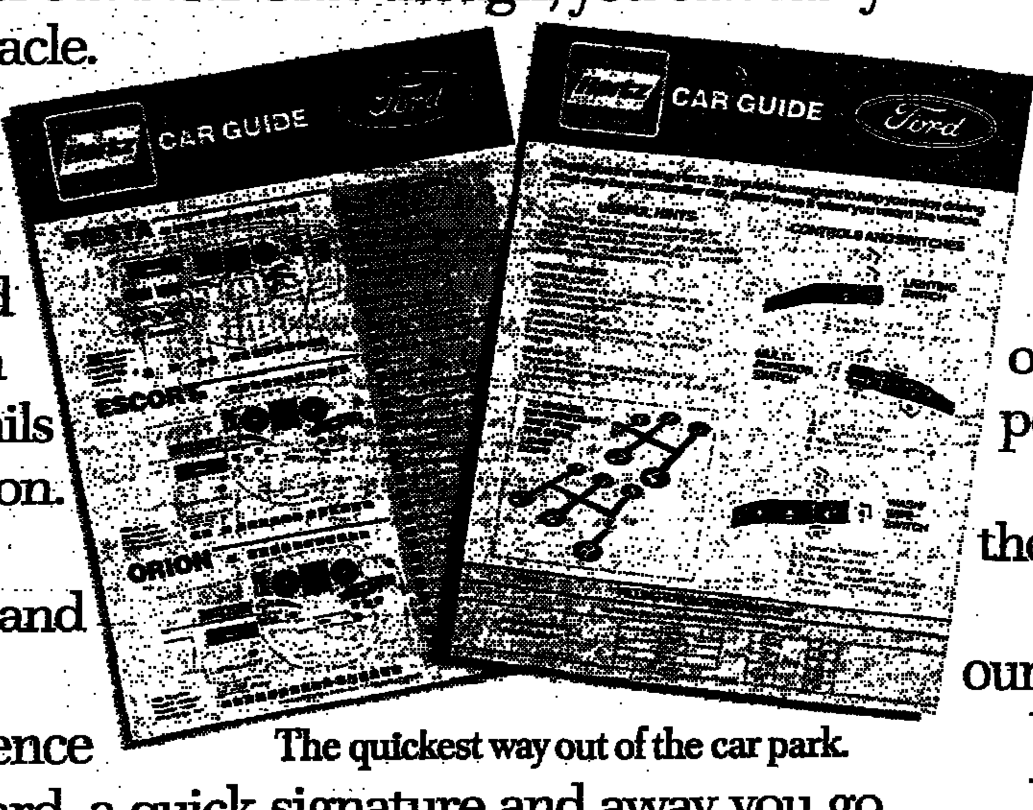

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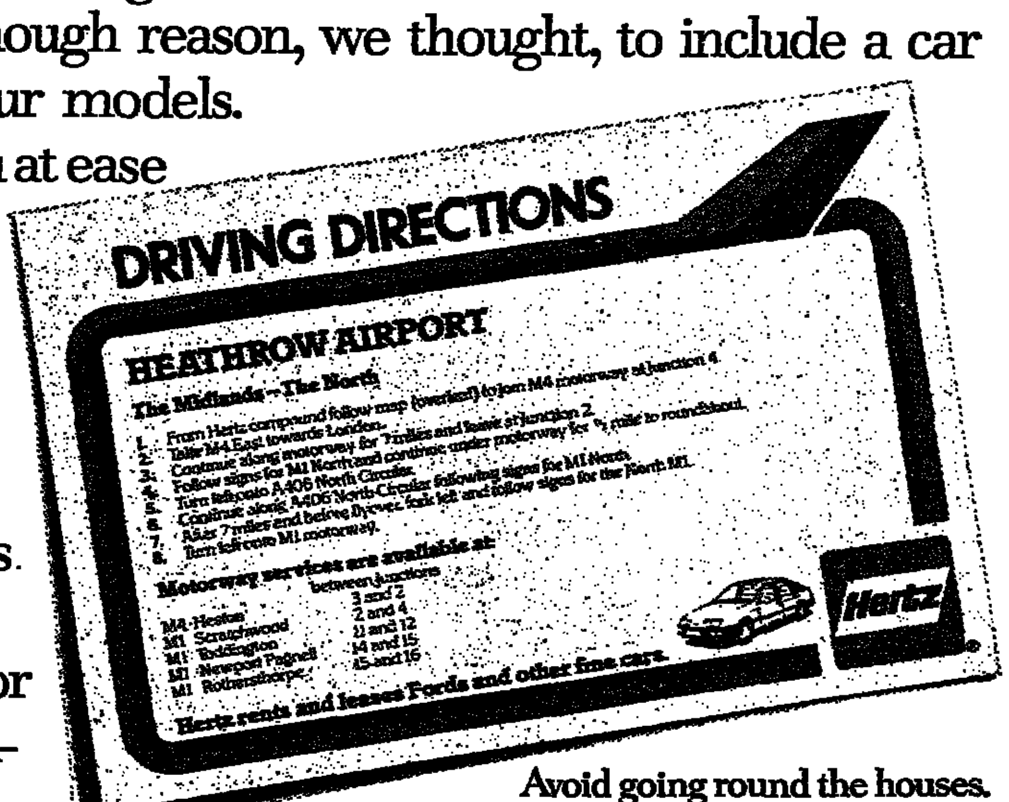

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COMPANY NOTICES

UNILEVER N.V.

Rotterdam The Netherlands

ANNUAL GENERAL MEETING OF SHAREHOLDERS

On Wednesday, 16th May, 1984 at 10.30 a.m. in the "Kleine Zaal" of the "Concert-en Congresgebouw de Doelen", entrance Kruisplein 30, Rotterdam

AGENDA

1. Consideration of the Annual Report for the 1983 financial year submitted by the Board of Directors.
2. Approval and adoption of the Annual Accounts and appropriation of the profit for the 1983 financial year.
3. Appointment of the members of the Board of Directors.
4. Appointment of Auditors.
5. Designation, in accordance with Articles 96 and 96a of Book 2 of the Netherlands Civil Code, of the Board of Directors as the company body authorised in respect of the issue of ordinary shares in the Company.

This agenda, the Report and Accounts for 1983, together with the Report of the Auditors and the further documentation pertaining to the Agenda are available for inspection by shareholders and holders of certificates issued by N.V. Nederlandsch Administratie- en Trustkantoor at the Company's office, Burg. s'Jacobplein 1 Rotterdam, and at the office of the Bank mentioned below, where copies may be obtained free of charge.

(A) Holders of bearer shares or sub-shares wishing to attend the meeting either in person or by proxy appointed in writing must deposit their share certificates and sub-share certificates by Wednesday, 9th May, 1984 at the Company's office or at the office of the Midland Bank plc, Mariner House, Pepys Street, London EC3N 4DA or any of its branches. *Upon production of the receipt then issued to them such holders will be admitted to the meeting.*

(B) Holders of registered shares for which certificates have been issued in another form and holders of booked shares wishing to attend the meeting either in person or by proxy appointed in writing must notify the Company of their intention by letter, stating the numbers of the share certificates or of the bookings for the shares, which must reach Unilever N.V., Afdeling Effecten en Coupons, Burgemeester s'Jacobplein 1, Rotterdam, The Netherlands, by Wednesday, 9th May, 1984.

(C) Holders of certificates for shares in Unilever N.V. issued by N.V. Nederlandsch Administratie- en Trustkantoor of Amsterdam, "Nedamtrust certificates", wishing to attend the meeting without taking part in the voting must deposit such certificates by Wednesday 9th May, 1984 at any [illegible]

(D) [illegible]

(E) [illegible]

Rotterdam, 24th April, 1984 — THE BOARD OF DIRECTORS

NOTICE TO HOLDERS OF BEARER DEPOSITARY RECEIPTS (BDRs) IN DAI NIPPON PRINTING CO., LTD.

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THE THARSIS PUBLIC LIMITED COMPANY

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PROVINCE OF MANITOBA (CANADA)

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AKZO N.V.

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ENTE NAZIONALE PER L'ENERGIA ELETTRICA

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UK NEWS

Sinn Fein reaps the benefits of a home-grown product

ASK ANY of the participants in the New Ireland Forum why the British Government should take their efforts seriously and you are likely to be told: "because if they don't, the Provos will take over in the north."

What they mean is that Sinn Fein, political wing of the Provisional IRA, would probably capture more than 50 per cent of the nationalist vote in Ulster, so upholding its claim that the "armed struggle" is backed by the nationalist minority. Successive British governments' the argument goes, have prevented constitutional nationalism – represented by the Social Democratic and Labour Party (SDLP) – from operating effectively. The SDLP has nothing to show for its 14-year struggle.

Unless the British Government responds constructively to the Forum's report, it is claimed, Sinn Fein will run Mr John Hume, the SDLP leader, a close second for Ulster's nationalist seat in the European elections in June, and will sweep the nationalist board in the 1985 local elections.

This prospect evokes a convincing show of alarm in Dublin. But is it to be taken at face value? Northern Ireland Unionists dismiss the argument as a transparent ploy by Dublin to railroad the British into rescuing the SDLP from annihilation. At the same time, they admit that Unionist politicians might welcome the SDLP's defeat at the hands of Sinn Fein. For while Britain might expect them to sit at the negotiating table with the SDLP, surely no one would expect the Unionist leaders to negotiate their future with representatives of gunmen.

Leaving aside the merits of the argument as they apply to the Forum – for there are better arguments for taking it seriously – the question remains: how well is Sinn Fein doing, and why?

In the south, it does not appear to be making much progress. Its electoral performance has been weak and erratic, giving it control of a handful of local councils but so far, no seats in the Dail, the Dublin parliament.

Significantly, Sinn Fein sees its entrée to southern politics not on the constitutional question but on social issues. In Dublin, for example, it has become active in the campaign to conquer the city's massive heroin problem. Sinn Fein members are prominent in the Concerned Parents Against Drugs group. Reports of Sinn Fein vigilantes knee-capping drug pushers are widespread, if hard to confirm.

In the north, Sinn Fein is doing better, though West Belfast is still its only stronghold. In order to establish itself as the voice of northern nationalism, Sinn Fein would have to capture most of the council seats in a wide arc from Derry in the north west through mid-Ulster, Fermanagh and South Armagh to Newry in the south east. It does not appear to be better established in these areas as a functioning political party than it was three years ago.

West Belfast, however, is different. This was never a strong SDLP area. Its former MP Gerry (now Lord) Fitt held it for years with a large personal following but he never managed to establish a strong party presence.

Sinn Fein has the advantage of being a home grown product. Its members are drawn from the Falls Road, Ballymurphy, Turf Lodge, Andersonstown and its families are well known in the community. While retaining its policy of "unambiguous support for the armed struggle," it has also started cleaning up its public image.

To begin with, it has set up 11 advice centres in the constituency – five in the Falls Road area – to deal with problems such as unemployment (giving advice on welfare rights, help in filling in applications and dealing with the Department of Health and Social Security, poor housing (putting pressure on landlords or the housing executive for repairs); law and order (drawing public attention to allegations of assault by the security forces) and so forth.

These are all problems that exist – in some cases more severely – in many parts of Britain and Ireland. The difference is that there, the focus of resentment is diffuse – the council, the police, the Prime Minister, the rich, the bureaucracy – but in West Belfast's Catholic ghettoes it is concentrated on one target: the "Brits."

The advice centres are shabby and poorly equipped, but their meticulously kept files reveal an impressive record of persistence, tracing months of haggling with landlords or chivvying the housing executive on a particular case, with each phone call noted.

The staff – mostly in their mid-twenties – appear to have few illusions about how much they can achieve in practical terms. One centre claims to be on good, first-name terms with the nearest health department centre. Mostly, however, the Sinn Fein workers say it is uphill all the way in dealing with government departments.

What is clear, however, is that Sinn Fein are attracting young people in a way none of the other parties appears able to match; that their workers are building up an intimate knowledge of the area, its families and their problems; and that the Sinn Fein/IRA image is becoming more ambiguous than ever.

Though members deny having any direct involvement in the activities of the IRA, they insist that support for the party implies support for the paramilitaries, and that votes for the party will be presented in that light. Yet even the church refuses to take this at face value. Cardinal Tomas O'Fiaich, in a much-criticised comment on Irish television earlier this year, said a person could be morally justified in joining Sinn Fein if he did so for the right reasons – such as involving himself in their community activities. Only a tiny minority of those who voted for Sinn Fein, he added, voted consciously in support of the armed struggle.

In the end, Sinn Fein may find – as the SDLP has – that electoral loyality based on constituency case work is an ephemeral thing and that its electoral performance will depend on factors outside its control.

The main factor is likely to be whether steps are taken to convince the nationalist community that Northern Ireland is their state too, and that they have as much of a role in it as anyone else.

The New Ireland Forum is due to report next week. It was set up last year by some political parties in the north and south of the country in an attempt to reconcile aspirations to Irish unity with present-day Ireland. Margaret van Hattem looks at the background in the first of a series of articles.

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THE MANAGEMENT PAGE

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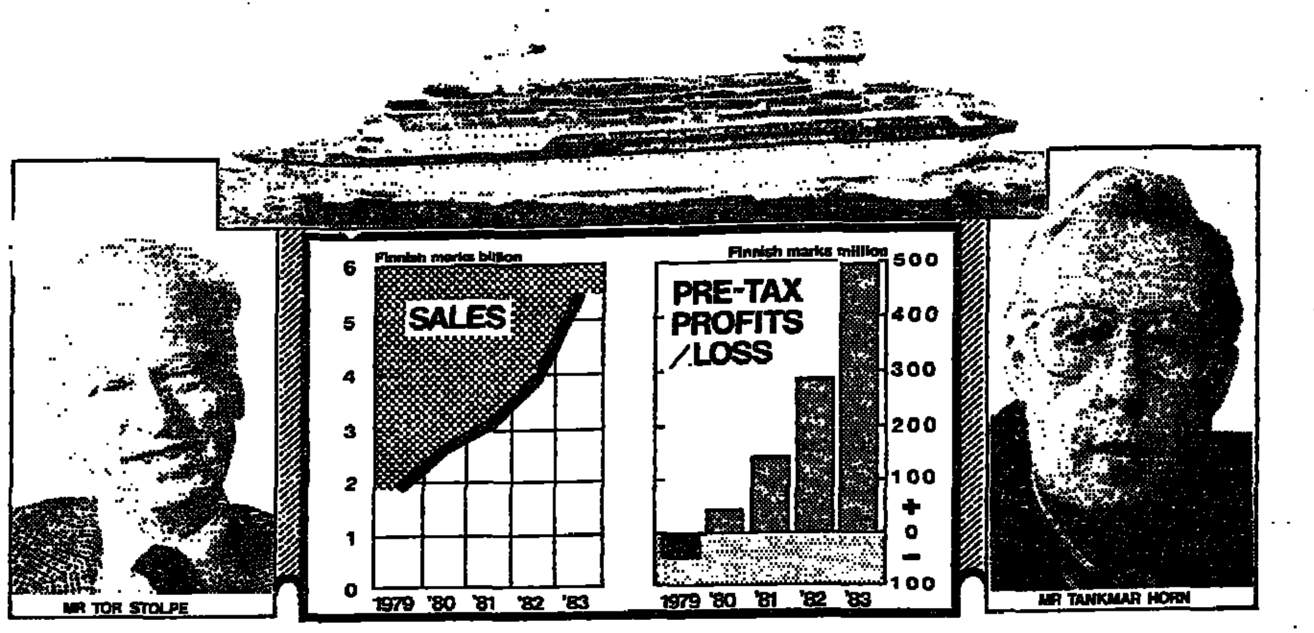


Why Wartsila is sailing into foreign capital markets

Andrew Fisher reports on the Finnish industrial group's growing internationalisation

WARTSILA, best known as a builder of luxury cruise ships—it is currently completing the 45,000 ton Royal Princess for P&O Cruises—will tomorrow become the first Finnish company to be listed on the London Stock Exchange.

Last week's placing of around 650,000 new shares in London raised some £25m for the company. The newly issued shares had restricted voting but *equal dividend rights*. Shareholders recently approved an overall limit of 910,000 new shares, of which the London issue was a part.

Wartsila is not the only Finnish company keen to attract UK and other foreign investors. Amer, whose activities cover tobacco, publishing and printing, and the manufacture of ice hockey sticks, also plans to come to London? "We need a

Why does Wartsila want to come to London? We need a very good financial base and Finland is not sufficient for us," says Tor Stolpe, president of the company and vice-chairman of the management board.

Though the company has just raised FM 180m through a rights issue, Finland's capital markets are too under-developed and heavily orientated towards tax-free savings bonds. The group has expanded its foreign sales and facilities rapidly in recent years.

Thus, adds Stolpe, a white-haired 56-year old with pleasant, chubby features who began his career as a geologist: "It is absolutely necessary for us to go *abroad. Marketing and research* costs are rising as Wartsila builds up its specialised markets and moves into new areas."

As well as tapping new sources of finance—it is also listed in Stockholm, where its issue last April raised FM 57m (£7.1m)—Wartsila is keen to boost its international image. With 85 per cent of its sales abroad, the company (150 years old this month) is no stranger to foreign markets.

But until five years ago, it had no foreign plants. Now it has 13 in four countries. Most of its non-Finnish sales are to neighbouring Scandinavia (25 per cent) or the Soviet Union (28 per cent). In future, it wants to strengthen its presence elsewhere.

Though ships make up the bulk of the group's turnover, Wartsila is heavily involved in other *industries. It* makes machines for paper-finishing (coating, imparting gloss, rolling, and wrapping), diesel engines, locks and security devices, sanitary and industrial porcelain, and domestic glass and porcelain products.

While not disdaining future growth in shipbuilding where its reputation for complex cruise, ice-breaking and other vessels outside the bulk cargo market is high, the group wants to build up its other activities more rapidly.

It bought Appleton Machine Company, a Wisconsin maker of paper-finishing equipment last year, as well as TrioVing of Norway and VingCard of the U.S., related companies which make locks and computerised hotel security systems. Wartsila also opened a diesel engine plant in Singapore in partnership with Keppel Shipyard.

At the same time, Wartsila has continued investing in its two shipyards: at Helsinki where the cruise ships are built, as well as ice-breakers, and at Perno near Turku where ice-strengthened cargo vessels and other special vessels are built. In all, Wartsila spent FM 426m last year on capital investments and acquisitions.

To investors unfamiliar with Wartsila, such an array of activities could be confusing. But the company does not make a habit of random diversification; it claims its moves are based on well thought out strategies. "Seeing your business with the market's eyes," is how Ari Valjakka, in charge of personnel and communication, puts it.

The conversation of Wartsila managers is peppered with references to strategic planning and management training.

The Appleton and TrioVing/VingCard purchases both sprang from the planning process. "It was a classic textbook case," says Pekka Virtanen, head of the engineering division about the $3m Appleton deal. Wartsila saw a need to have a paper machinery plant in the vast U.S. market, studied the market and went through a list of companies.

'Total concept'

It picked out Appleton and approached the company, then owned by its management and staff. The existence of a ready-made plan went down well with the company, believes Sven Bertlin, *in charge of planning*. "We could convince them that we had a good total concept."

He adds: "It would have been impossible to proceed efficiently and so fast in our internationalisation in the past five years without a strong strategic planning process."

Since the late 1970s when the problems of the world shipbuilding market affected its own operations and led to a FM 48m loss in 1979, Wartsila's results have improved sharply. From FM 42m in 1980, pre-tax profits rose to FM 493m last year. Sales in the same period soared from FM 2.6bn to FM 5.4bn, of which shipbuilding accounted for 64 per cent.

As well as the lucrative cruise market, Wartsila is heavily dependent on regular Soviet orders placed under the successive five-year plans. These are fixed early in the life of the plans and give the company a comfortable revenue cushion. *Several orders have just been* placed by the Soviet Union with Finnish yards ahead of the next plan, starting in 1986. These include two dredgers for Siberian river deltas, worth a total of FM 300m.

As Wartsila has expanded its geographical spread and built up its profits, it has developed a management structure not unlike that of many U.S. companies. Stolpe acts in the role of chief executive officer, though his title is different.

He is the driving force behind the strategic planning process, believing "it is very important to be able to combine new theories with practical experience." Wartsila, he says, is a company specialising in solving complex problems for its customers.

This can apply to cruise ships, special Arctic vessels, or other products. "Each is a project which forces our specialists to solve a lot of new questions."

But looking ahead, he adds: "We are not married to our businesses forever—we are married to making profits. We could drop some of them."

Technically senior to Stolpe, though the two men work closely together, is Tankmar Horn, *chairman of the group's* board of directors (a nine-man group of mainly outsiders, meeting once a month and approving major decisions) and of its four-man management board.

Stolpe thinks the group approach works well. "I do not think a company like Wartsila, in sophisticated, flexible, and difficult businesses, can be run by one man. It has to be run as a team."

Horn, tall, patrician looking, and three years older than Stolpe, agrees with his colleagues. "There is a kind of broad division, with Stolpe mainly responsible for the operations, while I am more involved with bigger individual deals."

In Finland, he has the courtesy title of Minister Horn, stemming from his days at the Foreign Ministry where he ended up as head of the trade policy division before joining Wartsila in 1969.

Horn's task, deriving from his diplomatic experience, is also to maintain links with the Finnish *authorities* and with the Soviet purchasers of new ships.

"From my point of view, it works very well indeed," says Stolpe of the dual responsibility arrangement. "He has a lot of experience in international business and trade; I am more experienced on the practical side."

Horn is aware that investors are likely to be highly sceptical of anything to do with such industries as shipbuilding. "We hope to get the message across that though we are working in a field considered, and rightly *so, to be in a crisis*, individual companies can still score fairly well in that field."

Wartsila stresses that many of the ships it has built have been prototypes. "We are able to accept orders for one item and not just series," explains Horn.

The group has spent heavily on new research facilities. This year has seen the opening of a new FM 20m research plant for paper-finishing machinery.

Virtanen, soon to move to the diesel division, says the building of the paper machinery research plant was one of the most significant decisions ever made in the engineering division. It is not just bigger and better machines that are needed, he comments. "You have to build machines with which the customer can compete and make money."

Like all the divisional heads, he reports directly to Stolpe, who insists that strategic planning should take full account of alternative courses of action in case things go wrong. "It's better to see the dark clouds, before, try to analyse them, and deal with them if necessary."

Wartsila has been doing long-range planning since 1972. It was only in 1979, says Bertlin, that the focus was really put on the strategic aspect. Each division and profit centre starts working out its plans and budget in the spring and hands this to the board in June. On the basis of these the group plan is drawn up, covering around five years for shipbuilding and three years for other activities.

The danger is that planning can be accepted as an exercise in itself. Wartsila tries to get round this by seeing that not too many people, and as little bureaucracy as possible, are involved. "The strategic plan," comments Goran Andersson, who runs the locks division, "is like a balance sheet. It describes the thinking at one point in time. You expect consistency, but things can change in between."

Building up a team of energetic, flexible, and committed managers is not easy in a small country like Finland, with only 4.8m inhabitants. "Finland is really short of managers," says Horn.

Wartsila has tried hard to build on the skills and talents available to the group. It employs nearly 18,000 people, more than half in shipbuilding and including 3,000 abroad. Of the total 1,400 are graduate engineers and 1,700 technicians.

The company has tried to develop so-called "conceptual skills" among its managers. Some 200 top managers have been through its main training programme, and 1,000 middle managers are about to go through a new scheme in the next three years.

Action learning

It is also putting some managers through what are dauntingly called "action learning" schemes. "We throw a person from a familiar environment to an unfamiliar environment or task, or both," explains Valjakka.

Five years ago, a group of Wartsila managers and workers, headed by Valjakka, went on an exhaustive and exhausting 16-day trip round Japanese plants, holding their own seminars along the way and boning up all the time on what they had learnt.

Beyond the welter of concepts, strategy, and training, how is Wartsila likely to fare in the years ahead? This year profits are forecast to be up, with 1985 likely to see a drop. While Wartsila expects further ice-breaker and cruise ship orders — it is to build an advanced ice-breaker for Finland—orders have peaked for the moment.

Also, the group accepted two large ferry orders for Finnish shipowners at low prices to stop them going to Japan.

"*We can't accept that* the big guys without work come here just to get the know-how. We had to fight for our interests and we shall fight again if forced to," maintains Stolpe. tion is by no means a corporate panacea, Wartsila will not be easily dislodged from those areas in which it has well-carved niches.

Management abstracts

Human resource accounting data and decision-making, T. A. Shimerda in Cost and Management (Canada), May/Jun 83: p. 41 (5 pages). Summarises the results of research studies which seem to show that the publication of human resources accounting data can affect management decision-making, for instance in job staffing and layoff decisions.

Size of organisation and attitudes to work, G. Stephenson and others in Industrial Relations Journal (UK), Summer 83: p. 28 (12½ pages, table). Reports the findings from a study of companies in the printing, engineering, hosiery, and food industries, on relationships between size of organisation and workers' attitudes to their jobs; draws conclusions that, simplified, show that small is good for industrial relations and large is bad for job satisfaction.

Demystifying Japanese management: J. M. Smith in Management Decision (UK), Vol 21 No 3.

Argues that fascination with Japanese management methods and practices tends to overlook the deeply-rooted cultural differences. Examines Japanese attitudes to the organisation, the management hierarchy, business negotiations, quality control, and R&D, and concludes that what we may be able to apply is very difficult to determine. Stresses that the way the Japanese do business is based on a long historical tradition, and that they are now considering transforming their authoritarian management style into a more open and democratic one along Western lines.

Developing strategic thinking. M. Easterby-Smith and J. Davies in Long Range Planning (UK), Aug '83

Argues that strategic ability will not blossom among senior managers unless it has been cultivated early in their careers; is sceptical about the value of formal courses—unless accompanied by a strong action element; discuss *how* internal management development can help give young managers exposure to strategic issues.

These abstracts are condensed from the abstracting journals published by Anbar Management Publications. Licensed copies of the original articles may be obtained at £3 each (including VAT and p+p; cash with order) from Anbar, PO Box 13, Wembley HA9 8DJ.

ENERGY REVIEW

By Aleksandar Lebl, Belgrade Correspondent

The high price of neglect

THE ENERGY situation in Yugoslavia is almost back to normal — that is to say no black-outs, no petrol rationing, no power reductions for industrial consumers, for the time being.

A few months ago the picture was quite different. Last year's drought, the worst in decades, hit Yugoslavia like other countries in the Danube river basin. The effect was drastic, even in the federal capital, Belgrade, whose residents were subjected to eight and a half hour power cuts on four days out of every five. In the republic of Serbia, of which Belgrade is also the capital, households were forced to cut electricity consumption by 20 per cent from the 1982-83 level. Electric power had to be imported from neighbouring countries, from France and from the Soviet Union.

The energy crisis fuelled discontent among Yugoslavs, already dissatisfied with a fall in living standards of nearly one-third in the past four years. Apparently uncertain about what to do, the federal government turned the main responsibility for action over to local emergency planning committees which themselves had no solutions to offer. Then the heavens intervened, just in time to give the Winter Olympics, held at Sarajevo in the Yugoslav republic of Bosnia, almost too much snow.

With plenty of rain and snow this spring, hydroelectric power output has increased, while the growth of consumption has tailed off in response to rising prices. The government has raised electricity prices by 50 per cent this year. But the International Monetary Fund and the World Bank, as part of their loan packages for Yugoslavia, are pushing for further increases to bring domestic prices more in line with world levels. So, of course, is the Yugoslav power generating industry.

The 1983 drought may have been the immediate cause of Yugoslavia's recent energy problems, but it was not the main reason for them. It only exposed weaknesses and shortcomings in energy policy. Indeed, many experts here believe it almost miraculous that decades of neglect of the energy sector did not show up earlier.

The main factor is that investment in hydro and thermal power plants and in coal mining has been far too low for the rapid industrialisation of the 1970s and electrification of households. Yugoslavia was also very slow in adjusting to the first oil price shock of 1973-74, and as a result continued building liquid fuel power plants long after the rest of the world was switching back towards coal or was going nuclear.

Last year, when oil imports were cut to save foreign exchange, many power plants using bunker oil were idle when their generating capacity was badly needed. Indeed, idle capacity amounted to some 1,000 MW, capable of generating 6bn kWh a year, more than the total power cuts and imports last year.

Inadequate energy investment has not been for lack of funds. A major reason for the underspending has been lack of agreement on what to build and where—the usual in-fighting between the country's eight republics and provinces which bedevils Yugoslav politics.

The classic case is the Drina River basin, the biggest in Yugoslavia and the fourth largest of its kind in Europe. Drina River hydro plants have the capacity to produce some 10bn kWh a year, even in relatively dry years, because of the many accumulation lakes in the system. But the Drina is the border river between two republics, Bosnia-Hercegovina and Serbia. It is formed by two confluent rivers, the Piva and Tara, which come from a third republic, Montenegro. For two decades now these three republics have been unable to agree on a joint programme of hydro power construction. Of a tentatively planned 25 hydro projects, only seven have been built.

The main obstacle has been the Montenegrin republican government. It wants part of the Piva and Tara water to be transferred to another Montenegrin river, the Moraca, claiming that this solution would benefit both it and the whole Yugoslav hydro system. The other two republics dispute this and object to the high cost of the solution advocated by the Montenegrins. Tripartite negotiations continue, but without an end in sight.

Another region of the country, the province of Kosovo, has ample reserves (around 10bn tonnes) of lignite, of too poor a quality to be used for anything but power generation. Power plants totalling 6,000 MW capacity have been planned, but so far only one plant, of 790 MW capacity, has been built. Even this plant is not being fully exploited, because lignite production, running at 7.5m tonnes, is below the 10m tonnes planned.

Thus, the Yugoslav power generation industry is forecasting more cuts and blackouts, particularly when the economy, which has had stagnant industrial production for some two years, begins to recover. Specifically, the power industry estimates that consumption will have to be cut by 2.6bn kWh this year and by 3.7bn kWh next year.

Plans exist for expanding hydro thermal and nuclear power. According to Mr Rade Pavlovic, chairman of the federal committee for energy and industry, by the year 2000 Yugoslavia should have 12,000 MW of thermal capacity, 8,000 MW of hydro and 2,000 of nuclear power capacity on stream. The construction of a further 4,000 MW capacity should be underway.

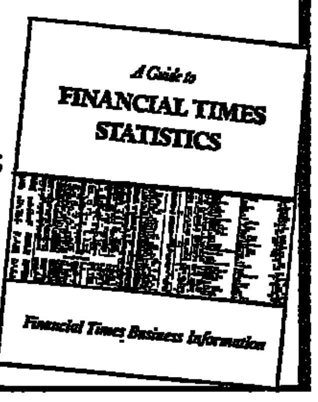
Where the money for all this will come from is not clear. It will mean devoting to energy 12-15 per cent of total investment or 30-35 per cent of industrial investment. The energy sector has been largely spared the public spending axe which the federal government has been recently wielding with IMF blessing. Yugoslavia is also getting World Bank loans for energy.

One urgent priority is to define the future shape of the Yugoslav nuclear programme. So far Yugoslavia has built only one nuclear plant at Krsko, on the Sava river near the border between the republics of Slovenia and Croatia, with equipment supplied by Westinghouse. The intention is to build a second one in Croatia, near Zagreb, but a decision has yet to be taken on the type of foreign design and equipment to buy.

Nuclear plant manufacturers from Britain, the U.S., France, West Germany, Sweden, and the Soviet Union (possibly in conjunction with Finland) have been wooing Yugoslavia for this order. But until this decision is taken, possibly by the end of 1984, the country cannot get on with its nuclear power programme.

Oil shale is considered a possibly promising energy source for the future. According to one estimate, total reserves of shale amount to some 10bn tonnes in the republic of Serbia alone, with oil content of 10-26 per cent. The largest deposits, of some 3bn tonnes, are around Aleksinac, a small town 150 miles south of Belgrade, where a pilot production plant is to start soon.

Meanwhile, Yugoslavia will have to rely on imports for a large portion of its energy needs.



APPOINTMENTS

Five directors for Scandinavian Bank

Five directors have been appointed to the board of SCANDINAVIAN BANK. They are: **Mr Jacob Palmstierna** and **Mr Per Ake Harrison**, managing director and deputy managing director respectively of Skandinaviska Enskilda Banken of Sweden; **Mr Paavo Laitinen**, deputy chief general manager of the Union Bank of Finland; **Mr Finn Strom-Gundersen**, deputy managing director of Bergen Bank, Norway; and **Mr Axel Roos**, managing director of Skanska Banken of Sweden.

★

STANDARD CHARTERED BANK has promoted **Mr C. W. G. Endacott**, at present chief manager, The Chartered Bank, Singapore, to the rank of general manager from May 1. He becomes general manager (group personnel) in London from that date, in succession to **Mr D. A. Weathersen** who is retiring.

★

Mr Anthony Roscoe has been appointed managing director of THAMES INVESTMENT AND SECURITIES.

★

SCOTTISH BUSINESS IN THE COMMUNITY (ScotBIC) has appointed two members to its governing council. They are: **Mr Norman Sturrock**—vice president, Citibank Edinburgh and **Mr Grahame Thomson**—partner, Arthur Young McClelland Moores.

★

Mr Alan J. Harrison has been appointed general manager of the London branch of MULTIBANCO COMEREX, SNC. He was general manager of the bank's Singapore branch.

ROBERT MOSS has appointed **Mr Dennis R. Stringer** to the board as group marketing director. He was marketing manager.

★

Mr John D. Elliott has been appointed deputy chairman of BRIDGE OIL in place of **Mr Maurice C. Timbs**, who, at his own request, relinquishes that position but remains a director. **Mrs Christine R. Campbell**, who has now become a full time executive of the company and has been appointed as general manager—international operations (non-technical), has resigned as a director, and **Mr Geoff F. Lord**, who is a director of Elders IXL, has been appointed a director in her stead. **Mr Frank P. Lowry** and **Mr John Saunders**, joint managing directors of Westfield Holdings, have been appointed additional directors of Bridge Oil.

★

CHASE MANHATTAN, London-based merchant banking arm of Chase Manhattan capital markets group, has appointed **Mr Homi P. R. Mullan** associate director—leasing and project finance. He was assistant treasurer with Burmah Oil.

★

Mr Terry Watkins—previously marketing director of the NORTHFLEET GROUP, Gravesend, has been appointed managing director following the resignation of **Mr Phil Search**. Mr Watkins also joins the board of Maidenhead Finance, a subsidiary which specialises in leasing retail display equipment.

★

Mr Richard Stutely, formerly with the Treasury and stockbrokers L. Messel, has been appointed an international economist with stockbrokers LAURIE MILBANK. His major areas of responsibility will be Germany, France and the Netherlands.

★

Mr Brian Hardy has been appointed to the board of CASTROL (a Burmah Oil company) as finance director. He is group financial controller of Unigate and will join Castrol in July.

★

Mr John Nye, managing director of Spit Fixings, has been re-elected chairman of the POWDER ACTUATED SYSTEMS ASSOCIATION. **Mr Ian Findlay**, managing director of Hilti (Gt Britain) has been re-elected vice-chairman.

★

JOHN WALKER AND SONS has appointed **Mr J. Stephen Campbell** a director. He will continue as company secretary.

★

Mr T. B. Ashcroft has been appointed to the board of JOHN DEWAR AND SONS.

★

GENERAL FOODS CORP has elected **Mr David Soffe**, managing director of GF Limited in the UK, as a vice president of the corporation. This follows the recent appointment of Mr Soffe as GF's area director, Northern Europe, in addition to his responsibilities in the UK.

★

Mr Mike Wheale has been appointed sales director of TI TOWER HOUSEWARES. He was sales and marketing manager.

★

TREBOR has appointed three chief executives—at Trebor UK **Mr Jack Thompson**; at Moffat **Mr Frank Reed**; and at Trebor Group Distribution **Mr Wallace Garland**.

CONTRACTS

£6m North Sea work for Comex Houlder Diving

COMEX HOULDER DIVING, Aberdeen, has won contracts worth around £6m for the company's subsea inspection, construction, and maintenance departments. In the inspection field, they cover inspection of platform and associated facilities for Conoco and the Murchison platform and associated factories Heather installation. Work is being carried out using two Comex Houlder diving support vessels, the Seabex at Murchison and the Ugland Comex 1 at Heather. In the southern North Sea, Comex Houlder is to undertake air diving and subsea construction work for Saipem on Conoco's Victor gas field. The work will be carried out from Saipem vessels. Still in the southern sector, Comex Houlder has secured a contract for inspection work on three platforms in the West Sole gas field. The maintenance department has won a contract from BP for air diving and associated maintenance work in the Forties Feld. The diving team is being deployed from the BP diving support vessel, Sulair.

★

A joint venture between METAL AND PIPELINE ENDURANCE of Hitchin and local group YUSOF Holdings of Bandar Seri Begawan has been awarded a a contract worth about £3m by the Brunei Shell Petroleum Company Berhad. The new company will provide the management, personnel and equipment to carry out exhaustive quality-assurance and non-destructive testing programmes on the numerous oil platforms in the Brunei offshore field. MAPEL YUSOF will also train Bruneians in the latest inspection and ndt techniques. MAPEL is part of AMEC.

★

WESTINGHOUSE SYSTEMS, a Hawker Siddeley company, has been awarded the contract to supply a computer-based telecontrol system for the Yorkshire Electricity Board. Total value of the contract, including spares and sundry equipment, is £3.4m. The purpose of the telecontrol scheme is to collect data from 424 substations, and to provide supervisory and remote control facilities at each substation from the three regional control centres at Leeds, Sheffield and Hull. The first control centre equipment is scheduled for delivery and commissioning early in 1985, with the other two centres following a few months after.

BASE LENDING RATES

A.B.N. Bank	8½%
Allied Irish Bank	8½%
Amro Bank	8½%
Henry Ansbacher	8½%
Armco Trust Ltd.	8½%
Associates Cap. Corp.	9 %
Banco de Bilbao	8½%
Bank Hapoalim BM	8½%
BCCI	8½%
Bank of Ireland	8½%
Bank of Cyprus	8½%
Bank of India	8½%
Bank of Scotland	8½%
Banque Belge Ltd.	8½%
Barclays Bank	8½%
Beneficial Trust Ltd.	9½%
Bremar Holdings Ltd.	8½%
Brit. Bank of Mid. East	8½%
■ Brown Shipley	9 %
CL Bank Nederland	8½%
Canada Perm't Trust	8½%
Castle Court Trust Ltd.	9 %
Cayzer Ltd.	8½%
Cedar Holdings	9 %
■ Charterhouse Japhet	8½%
Choulartons	10½%
Citibank Savings ¶	9½%
Clydesdale Bank	8½%
C. E. Coates	9½%
Comm. Bk. of N. East	8½%
Consolidated Credits	8½%
Co-operative Bank *	8½%
The Cyprus Popular Bk.	8½%
Dunbar & Co. Ltd.	8½%
Duncan Lawrie	8½%
E. T. Trust	9 %
Exeter Trust Ltd.	9½%
First Nat. Fin. Corp.	11 %
First Nat. Secs. Ltd.	9½%
Robert Fraser	9½%
Grindlays Bank ‡	8½%
■ Guinness Mahon	8½%
■ Hambros Bank	8½%
Heritable & Gen. Trust	8½%
■ Hill Samuel §	8½%
C. Hoare & Co. †	8½%
Hongkong & Shanghai	8½%
Kingsnorth Trust Ltd.	10 %
Knowsley & Co. Ltd.	9½%
Lloyds Bank	8½%
Mallinhall Limited	8½%
Edward Manson & Co.	9½%
Meghraj and Sons Ltd.	8½%
Midland Bank	8½%
■ Morgan Grenfell	8½%
National Bk. of Kuwait	8½%
National Girobank	8½%
National Westminster	8½%
Norwich Gen. Tst.	8½%
People's Tst. & Sv. Ltd.	9½%
R. Raphael & Sons	8½%
P. S. Refson & Co.	8½%
Roxburghe Guarantee	9½%
Royal Trust Co. Canada	8½%
■ J Henry Schroder Wagg	8½%
Standard Chartered ‖	8½%
Trade Dev. Bank	8½%
TCB	8½%
Trustee Savings Bank	8½%
United Bank of Kuwait	8½%
United Mizrahi Bank	8½%
Volkskas Limited	8½%
Westpac Banking Corp	8½%
Whiteaway Laidlaw	9 %
Williams & Glyn's	8½%
Wintrust Secs. Ltd.	9 %
Yorkshire Bank	8½%

■ Members of the Accepting Houses Committee.
* 7-day deposits 5.25%. 1-month 6%. Fixed rate 12 months £2,500 8% £10,000. 12 months 8.25%.
† 7-day deposits on sums of: under £10,000 5¼%. £10,000 up to £50,000 6¼%. £50,000 and over 7¼%.
‡ Call deposits £1,000 and over 5¼%.
‖ 21-day deposits over £1,000 6¼%.
§ Demand deposits 5¼%.
¶ Mortgage base rate.

THE ARTS

Television/Christopher Dunkley

Some fresh air at last on Channel Four

Amid the endless columns of the television schedules *Jesus: The Evidence* and the new *Diverse Reports* make a patch not even as big as Jeremy Isaacs' hand. Yet their arrival suggests that at last, after 18 months, Channel 4 is beginning to do its job. Up to now those who campaigned for a fourth channel in the belief that Britain's three conformist channels should be supplemented by one non-conformist channel have been somewhat disappointed.

The launch of the channel was preceeded not by some vague suggestion that it might be different but by an insistent nation-wide PR campaign during which innumerable promises were made about encouraging innovation, being "distinctive," "increasing the very range of choice" and above all providing "not more of the same but something different." In other words not conforming to the BBC/ITV pattern — hence "non-conformist."

Perhaps there are some who feel that the two hours of *Racing From Epsom* with which the channel opens today is "distinctive." Maybe the same people believe that the 1942 movie *Somewhere On Leave* with which the channel opens tomorrow is not merely "the third of ten ramshackle comedies" as TV Times says but "an increase in the very range of choice." If so, perhaps they also consider Channel 4's panel games *Where In The World*, *Jeopardy* and *Countdown* "not more of the same but something different."

It is not that the channel has never shown admirable or entertaining material: all sorts of programmes from *The Far Pavilions* to *The Spanish Civil War* have deserved and received praise. But there has been nothing very new or distinctive about them, and most could just as easily have turned up on ITV or BBC-2. Indeed *The Spanish Civil War* is now being repeated on ITV and no doubt *The Far Pavilions* will be in due course.

There are, of course, those hopelessly ill advised apartheid series *Black On Black* and *Eastern Eye* which set out deliberately to identify and emphasise racial distinction. They are certainly "different" even though the woman in charge of them claims "They are no different from programmes for keep fit fanatics, bridge players, or current affairs buffs" for all the world as though one could choose one's colour, race, or birthplace as one chooses hobbies.

But *Jesus: The Evidence* and *Diverse Reports* really are different in quite important ways from what we have come to expect on British television, and their appearance suggests that those of us who believed that Isaacs was the man who might be able to bring the true whiff of non-conformism to a new channel and form a protective enclave for non-conformists were perhaps right after all.

Up to now television has been pusillanimous about religion. It is, perhaps, only to be expected in a country which in the late 20th century still tolerates an "established" church that television systems ultimately under the thumb of a government automatically containing representatives of that church will pay considerable lip-service to it. However, the craven manner in which first the BBC and then ITV simply became mouthpieces for this one religion in a society ostensibly priding itself upon pluralism and diversity of thought was deeply depressing for anybody who found all organised religions ominous and the thought of a single state religion positively offensive.

Even believers have often found television's treatment of Christianity worrying, though the point that has troubled them — trivialisation — is scarcely unique since television has, from time to time, trivialised virtually everything in its drive for the big audience. No doubt more intelligent Christians felt that series such as *Stars on Sunday*, depicting Christianity as a mixture of community singing, serious looks from Harry Secombe, and soft-focus shots of daffodils were demeaning yet they certainly seemed to be what the majority of "religious" viewers wanted.

That was the provision of religion as the opium of the people; not a function to be eschewed necessarily by a modern mass medium, however appalling some of us may find it. But television's other function, that in the world of journalism, as a seeker after facts and nowadays a primary conveyor of those facts to the public, has been virtually ignored so far as religion is concerned.

Jeremy Brett (left) is the latest actor to play Conan Doyle's Baker Street detective in "The Adventures of Sherlock Holmes" which started on ITV last night. The eternally puzzled Dr Watson is David Burke

Most Christians, when asked why they are Christians rather than Muslims or Buddhists will sooner or later rest their case on The Bible (though if they were honest they would admit it was mainly a matter of geographical chance, and they would also have to admit that they had not studied the holy books of other religions in order to discover the most convincing, but that is another matter). This being so it is surely right that we should investigate the truth or otherwise of what The Bible says, so far as we are able, yet television has rarely done any such thing, and never — so far as I know — systematically.

Jesus: The Evidence was an attempt by David Rolfe and Julian Norridge to do it in three hours. It is a pity they did not have 10 more episodes. It is a shame that the "dramatised" bits of business were so awful (the discovery of the Gnostic Gospels looked like something by Wilson, Keppell, and Betty, the "exploding" statue of Christ was silly, the bloody pictures of crucifixion and Christian martyrdom were sensation-mongering) and it is unfortunate that there wasn't a tough old Fleet Street sub-editor on hand to knock the script into more coherent shape.

Yet it was still a commendable and valuable effort as the response of "believers" has proved. The reactions to the series have been almost more interesting than the programmes themselves. The first response of those with what they call "faith" is to say that of course everybody already knew that the Gospels were written decades after the event and not by eye witnesses, and that the main points in the Christ story — from virgin birth to resurrection via the miracles — are common to several pre-Christian myths and religions.

Yet it seems very doubtful whether most viewers do know such things, and it is just as important that today's major mass medium, television, should publicise such facts as it was that Italy's 17th-century mass medium, print, should publicise Galileo's proof of the Copernican theory which said that the earth moved round the sun. The hostility shown to *Jesus: The Evidence* reeks of the same intolerant fear of facts shown by the Inquisition when they threatened Galileo with the rack in order to force him to recant from his fearful heresy. The earth going round the sun indeed! Next they'll be saying that Jesus was simply a Jewish hypnotist. . . .

It is contrary thinking of Galileo's sort—non-conformism — which has brought man at such extraordinary speed up off all fours, out of the caves, and away into space, and it is contrary thinking of that sort which television has so signally lacked. Owing to scarcity of channels there has been an understandable tendency to represent and even support what was seen as th middle ground and the status quo. While newspapers and books could offer all sorts of attitudes, television was obliged to stick to something called "objectivity" which may be a goal worth aiming for, despite its inaccessibility.

The strivers towards objectivity are, rightly enough, still around, but now with *Diverse Reports* in its new incarnation television has grown up in a significant way. In the past few weeks Ferdinand Mount has reported on the case for private bus services. Christopher Huhne has explained the idea of a Labour/SDP pact to avoid splitting the left wing vote at the next election. Paul Johnson has put the case against subsidising the arts. A black American who may perhaps have been a Friedmanite monetarist argued that the welfare state, the unions and the race relations industry all act against the ultimate interests of black people. And a woman has tried to show that cancer of the cervix is not connected with promiscuity.

Moreover the programme's own reports have openly taken up positions on such matters as "low sugar" rusks for babies (more sugar per gram than doughnuts) and the Charity Commissioners ("not only is the law out of date, but the Charity Commission is clearly not up to the job of enforcing it.")

Even two swallows may not make a summer, but the little patch of blue is clear now and it looks as though Channel 4 may be strating its spring.

Radamisto/Radio 3

Stanley Sadie

Among Handel's operas *Radamisto* occupies a special place, as the first he wrote, in 1720, for the Royal Academy of Music. It was not his first London opera (that was *Rinaldo*, nine years before), but the one designed to inaugurate his contribution as house composer to the organisation designed—pious hope!—to put London's operatic life on a secure basis, financial and administrative.

"Few of Handel's operas would offer more amusement to a modern audience than *Radamisto*, in which there are so many fine songs in various styles . . . its intrinsic worth and Handel's still increasingly celebrity would excite attention and renovate its favour." Those were Charles Burney's words, in 1789. They may stand. *Radamisto* has not, I believe, been revived since the Handel Opera Society production seen in 1960 and 1962. The plot is contrived but does what is asked of it: it provides opportunities for music in a large variety of emotional contexts. The central couple, Radamistus and his wife Zenobia, are threatened by the Armenian King Tiridates' unruly desire for her.

There is a superb sequence in the last act: a pledge of fidelity from the imperilled Radamistus, counterpointed with woodwind; a furious outburst from Tiridates' wife, Polissenna, voice and violin vying in energetic expression; an assertive aria with horns for Tiridates (one of their earliest appearances in opera); and a pathetic prayer with solo cello, interspersed with enraged explosions, for Zenobia. Earlier there is a brilliant trumpet aria. The whole opera is richly orchestrated.

Sunday's BBC performance at first struck me as curiously old-fashioned. The orchestra was the English Chamber—no period instruments, so textures much more dense and sustained than we have become used to; the bass-line especially seemed thick, and occasionally leaden. The performance was planned with the late Sir Anthony Lewis, who unhappily died before it was recorded; possibly it represented his outlook more than that of Roger Norrington who in the event conducted. There were some moments of unsure ensemble and two or three puzzling tempos early on, but it was generally sound in style and sensibly paced.

What we ought to reckon really astonishing—do we take too much for granted?—is the superb quality of English Handel singing at present. Ten years ago here, or anywhere else in the world, such a level as this would be unimaginable.

The cast was headed by Janet Baker, virtually at her best: the elegiac F minor aria in Act 2, even though Mr Norrington embarked on it rather fast, had all her characteristic intensity, and in an earlier one she spat out her semi-quavers in due expression of her contempt for an "empio tiranno." This is one of two male roles originally composed for a woman singer; the other, Tigranes, was taken by Lynda Russell and delivered in a fluent and most musical manner. Della Jones as Zenobia imparted a fine precision and urgency equally to words and music; I admired the fire in her Act 1 aria and the passionate phrasing of the one in Act 2 with oboe that so resembles Handel's Largo. There was some pleasantly free and light singing from Patrizia Kwella, even if a castrato role like Fraarte's is not quite right for her. Eiddwen Harrhy was in strong, glittering voice as Polissena, at her best competing with the solo violin. Malcolm King made an excellent elder statesman as the King of Thrace, and Martyn Hill did pretty well in the wicked Tiridates' vigorous arias, but shone especially in the caressing music of the one in Act 2.

Howard Jones, Hammersmith

Antony Thorncroft

Pop idols come in all imaginable shapes and sizes, but this year it is fashionable to be small. Two names that have burst from nowhere, or rather from Ipswich and High Wycombe, on to the walls of 1m teenage girls' bedrooms, Nik Kershaw and Howard Jones, are both wisps of lads.

Not so much in age, though: they are considerably older than their supporters and sometimes give the impression that they would have preferred the adulation of a more sophisticated clientele. But business is business, and on Monday night at the Hammersmith Odeon Jones was quite willing to mix it with his fans, leaping into the audience to be lost in an orgy of hand touching.

Perhaps the most surprising feature of Howard Jones's success is that it is built around a synthesiser, a contrivance that should by now have programmed itself out of existence. By mixing his tapes before the concert Jones can give the controls a few key notes and then hop around the stage, leaving the machine to churn out the music.

Even though it is a very impressive circular synthesiser—at the end it revolves and flashes out lights—and gives the impression that Jones is controlling single handed the power supply for most of the south of England one man and his machine rarely make for continuous visual excitement. Jones does his best in his white tunic; one of those mikes that is fixed to the face like a tooth brace; and phosphorescent lights in his spikey multi-coloured hair, but just in case the attention wanes he has a dancer, Jez, who mimes and contorts to some of the songs.

Apart from his cheerful, positive approach it is Jones' ability to devise catchy simple riffs that has powered his debut album to the top of the charts. His latest hit "New song" is ridiculously uncomplicated and in fact leaves the audience to holler out responses: there is no reason why it should ever end. He closed his act with another triumph of machined sound "What is love," which irritates by its infectiousness.

But Jones is obviously a talented keyboards player and his rare excursions actually playing the piano with an almost Joni Mitchell plaintiveness were the musical treats of an evening which just stayed the right side of the boredom threshold. And sometimes even the dread appearance of Jez was diverting, notably on "Equality," in which, with half his body suited and the other half punked, he expressed physically a good song and made it more than a synthetic musical bleep.

When Jones tries to communicate verbally rather than through music or his appearance he comes apart: there was a banal attempt to explain the "story" behind the cover of his album. But as pop idols go Howard Jones goes further than most in musical appeal.

New York Theatre/Frank Lipsius

Coming of age on and off Broadway

As the "me" generation grapples with the real world, it generates bestselling books like, *When Bad Things Happen to Good People*, and equally sentimental but surprisingly varied plays like *To Gillian on her 37th Birthday* and *A . . . My Name is Alice*. *To Gillian* is the second play this season to go beyond its origins at the Ensemble Studio Theatre, the off-off Broadway venue in the riverfront warehousing district. The first, *Open Admissions*, made the mistake of taking the leap to Broadway, where a superb production of Shirley Lauro's interesting review of 1960s do-goodism could not find a large enough audience to sustain it.

To Gillian wisely chose to open off Broadway at the Circle in the Square Downtown, where its sentimental view of the premature death of a young mother has made it the season's theatrical *Terms of Endearment*. Playwright Michael Brady cannot change the scene, well wrought as it is in Robert Thayer's sandy and convincing New England clapboard summer home. Instead, more and more characters come to crowd the place. The three key characters, a father, daughter and her close friend, have useful, and sometimes moving conversations, usually in pairs. The more people who meet together, the worse the dialogue becomes, as characters with sincere if sentimental thoughts become caricatures of themselves in the presence of a crowd.

While *Open Admissions* got better in this transition to Broadway, *To Gillian* could only have got worse. I did not see the original, but this production suffers from the typical disease that happens to plays stretched from one act to two. It got full of characters the playwright tried to make interesting while they remain superfluous.

Individually, some of the best acting comes out of the peripheral characters, like Jere de Baer as the psychologist aunt Esther, and Richmond Hoxie as her henpecked husband, Paul. But the main characters—David Baecke as David, Noelle Parker as Cindy and Sharah Jessica Parker as Rachel — carry the best of Michael Brady's script, where he expostulates eloquently on a subject derived from the same sources as *When Bad Things Happen to Good People*.

Gillian herself, a ghost only the husband can see, is played by an attractive-looking Cheryl McFadden, who does the best she can with an impossible role. Gillian is the perfect woman until her attributes suddenly sound more pretentious than attractive. A romantic anthropologist, she abandoned her family to live in Africa and died in a fall from a boat mast, where her daughter notes, she probably should not have been in the first place. The playwright recognised how crucial it was to make Gillian attractive, but just made her a caricature of the 1960s he-woman, a breed that gets a much less idealised portrait in *A . . . My Name is Alice*.

The team from A . . . . . My name is Alice

Joan Micklin Silver, who directed the movie *Hester Street* before working in professional theatre, has turned her considerable talents to unusual musicals, which might be thought of as the live version of video cassettes. An earlier venture put imaginative scenes to Randy Newman songs, after Ms Silver saw how playwright David Rimmer effectively integrated Beatles songs into his play *Album*, which she directed.

A . . . My Name is Alice looks at the lot of woman circa 1984 and finds reasons to sympathise (what the women would more likely call "empathise"), chide and encourage. After the Beatles and Randy Newman, Ms Silver (with her co-director Julianne Boyd) knows a good song when she hears one, and here has picked an assortment from excellent writers, including Mark Saltzman and Stephen Lawrence, David Zippel and Doug Katsaros.

The scenes are varied and telling: a kindergarten teacher rebukes a neglectful mother who is a preoccupied executive, while a teenager and a middle-aged woman share a sad and anxious song about waiting for a date. The songs touch raw nerves enough to hurt but clever enough to laugh at, too. The excellent cast of Roo Brown, Randy Graff, Mary Gordon Murray, Alaina Reed and Charlaine Woodard have taken the musical from a well-received tryout at the American Place to a home at the Village Gate.

The Circle in the Square's uptown revival of Clifford Odets' *Awake and Sing!* is a reminder that radical politics and sentimentality are far from incompatible. If the play is to be believed, sentimentality is almost the wellspring of radicalism, despite a patina of tough talk and rigorous, if wrong, analysis. Misguided idealism makes the playwright seem as callous to character as a government letting people starve to death.

Characters lapse into banal stereotypes that actors as accomplished as Nancy Marchand, Thomas G. Waites, and Michael Lombard cannot rescue from singsongy platitudes. These Depression-hit family members seem less like a family than a car full of New York subway straphangers turning one generation's politics into another's sentimentality.

Arts Guide

Music/Monday. Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

April 20–26

Theatre

TOKYO

Cats (Cats Theatre). The specially built tent theatre, excellent set, good dancing and Kabuki-originated movement all make the Japanese version worth seeing. Shiki company, directed by Keita Asari. (320 1001).

Kabuki: Mumazu, Sonezaki Shinju or Double Suicide at Sonezaki (Kabuki-za). One of Chikmatsu's most famous plays based on a true incident. English programme details, simultaneous earphone commentary. (541 3131).

Kabuki: Go-hiki Tsunagi Uma, or Pulling the Tethered Horse (Meiji-za). This production is reputed to have cost Y10m ($44,000) and tells the story of a man who disguises himself as various warriors, and a spider in order to avenge his father's death. (667 5151).

LONDON

Starlight Express (Apollo Victoria): Andrew Lloyd Webber's new musical is a roller rink spectacular with obvious debts to Spielberg, Disney, Star Wars, Dolly Parton and Cats. Trevor Nunn's production is for children of most ages, with the human rock and rolling stock trains racing around the transformed theatre like body-popping ethereal robots. Designs by John Napier, lighting by David Hersey. (834 6184).

Guys and Dolls (Olivier): Richard Eyre's fine production returns to the National Theatre for a few summer months before possibly moving into the West End. The new principals include Andrew C. Wadsworth as Sky Masterson. The revival has been rushed back as the unlamented Jean Seberg was rocking the boat. (928 2252).

Benefactors (Vaudeville): Disappointing new Michael Frayn play about two interlocked married couples whose design for living is threatened by the high rise developments in early 1970s London. Outstanding performance by Brenda Blethyn as a discouraged housewife. Michael Blakemore directs. (836 5645).

Strange Interlude (Duke of York's): Glenda Jackson leads a revival of Eugene O'Neill's five-hour Pulitzer prize-winning Freudian drama. The play – first and last seen in London in 1931 – blends interior monologue with powerful scenes of insanity, retribution and despair. Keith Hack directs, cast includes Edward Petherbridge, James Hazeldine, Brian Cox. (836 5122).

Passion Play (Wyndham's): Deserved revival of Peter Nichols's experimental menopausal comedy, with Barry Foster, Leslie Phillips, Zena Walker and Judy Parfitt. (836 3028).

Loot (Ambassadors): Leonard Rossiter is a wonderful Truscott in Jonathan Lynn's enjoyable revival of Joe Orton's farce in which a leading role is played by a mummified corpse.The versatile Gemma Craven plays the Irish nurse who is open to offers and party to crime. (836 1171).

The Aspern Papers (Haymarket): Vanessa Redgrave and Wendy Hiller give superb performances in Michael Redgrave's 1959 version of Henry James's story. The inquisitive scholar who descends on their Venetian palazzo is played, ponderously, by Christopher Reeve. (930 9832).

A Streetcar Named Desire (Mermaid): Sheila Gish gives the performance of her life as Blanche Dubois in Alan Strachan's excellent revival, first seen last year at Greenwich. Tennessee Williams's emotional roller-coaster of a play amounts to one of the best evenings in town. (930 6123).

Little Shop of Horrors (Comedy): Campy off-Broadway import which is less good than The Rocky Horror Picture Show but which has a curious charm, a full-blown performance from Ellen Greene and an exotically expanding man-eating prickly plant. (930 2578).

Pack of Lies (Lyric): Judi Dench in a decent, enthralling play about the breaking of a spy ring in the suburban Ruislip of 1959-60. Hugh Whitemore's script cleverly constructs a drama about betrayal from the friendship of neighbours. The story is based on fact and well directed by Clifford Williams. (437 3686).

The Real Thing (Strand): Susan Penhaligon and Paul Shelley now take the leads in Tom Stoppard's fascinating, complex, slightly flawed new play. Peter Wood's production strikes a happy note of serious levity. (836 2660/4143).

Daisy Pulls It Off (Globe): Enjoyable romp derived from the world of Angela Brazil novels: gym slips, hockey sticks, a cliff-top rescue, stout moral conclusion and a rousing school hymn. Spiffing if you're in that sort of mood. (437 1592).

Noises Off (Savoy): The funniest play for years in London, now with an improved third act. Michael Blakemore's brilliant direction of backstage shenanigans on tour with a third-rate farce is a key factor. (836 8888).

Saint Joan (Olivier): Staid and stolid National Theatre revival of a play that is finding it increasingly hard to live up to the tag of Shaw's masterpiece. Frances de la Tour is sincere and unrhetorical to a fault as the maid, and Ronald Eyre's direction includes medieval pageant, some striking music by Ilona Sekacz and, alas, a disastrous deputy inquisitor from Cyril Cusack. (928 2252).

NEW YORK

Cats (Winter Garden): Still a sellout, Trevor Nunn's production of T. S. Eliot children's poetry set to trendy music is visually startling and choreographically feline, but classic only in the sense of a rather staid and overblown idea of theatricality. (239 6262).

La Cage aux Folles (Palace): Perhaps this season's outstanding musical comes, like Evita and Cats before it, at the very beginning of the theatrical year. Despite stellar names such as Harvey Fierstein writing the book and Jerry Herman the music, the best parts of the show are not the hoopla, apart from the first-act finale a la Gaîté Parisienne, but the intimate moments borrowed direct: An immodest celebration of the heyday of Broadway in the '30s incorporates gems from the original film like Shuffle Off To Buffalo with the appropriately brash and leggy hoofing by a large chorus line. (977 9020).

42nd Street (Majestic): An immodest celebration of the heyday of Broadway in the '30s incorporates gems from the original film like Shuffle Off To Buffalo with the apropriately brash and leggy hoofing by a large chorus line. (977 9020).

Torch Song Trilogy (Helen Hayes): Harvey Fierstein's ebullient and touching story of a drag queen from backstage to loneliness incorporates all the wild histrionics in between, down to the confrontation with his doting Jewish mother. (944 9450).

Dreamgirls (Imperial): Michael Bennett's latest musical has now become a stalwart Broadway presence despite the forced effort to recreate the career of a 1960s female pop group, a la Supremes, without the quality of their music. (239 6200).

Nine (46th St): Two dozen women surround Sergio Franchi in this Tony-award winning musical version of the Fellini film 8½, which like the original celebrates creativity, here as a series of Tommy Tune's exciting scenes. (246 0246).

On Your Toes (Virginia): Galina Panova with presumably a genuine Russian accent leads an exuberant cast in the remake of Rogers and Hart's 1936 sendup of Russian ballet tours, complete with Slaughter on Tenth Avenue choreographed by George Balanchine and directed, like the original, by George Abbott. (977 9370).

Carmen (Vivian Beaumont): Peter Brook has done an excellent job in transforming this Lincoln Center landmark into a spruced-up version of his grubbier Paris Bouffe du Nord home for a fast-paced, stripped-down seven-performer, but wholly engrossing version of Bizet. (874 6770).

Noises Off (Brooks Atkinson): Dorothy Loudon brings Michael Frayn's backstage slapstick farce to Broadway in Michael Blakemore's production that includes Brian Murray, Paxton Whitehead and Victor Garber as her backstage conspirators. (245 3430).

The Real Thing (Plymouth): After 14 months in London, Tom Stoppard's latest giggle at the English intelligentsia, with a new-found attention to the heart that beats beneath the veneer, arrived on Broadway in a cast headed by Jeremy Irons and Glenn Close, directed at a fast clip by Mike Nichols. (239 6200).

The Human Comedy (Royal): A sold out ten-week engagement at the Public led to this Broadway incarnation of William Saroyan's gentle story of California folk, as interpreted in oratorio by Hair's creator Galt MacDermot with William Dumaresq's libretto. (239 6200).

CHICAGO

E. R. (Forum): Moving into its second year parodying melodrama in a hospital setting, this emergency room continues its adventures among a young doctor, a receptionist and an authoritarian nurse. (496 3000).

WASHINGTON

Beyond Therapy (Kreeger): Christopher Durang's romantic comedy has all the elements of modern singles life including meeting through the personals column of a newspaper and a scene in a hip restaurant, but it reflects more than explores the shallowness of a surfeit of choices. Arena Stage (488 3300).

King Lear/Stockholm

Ossia Trilling

After eight years in the wilderness, Ingmar Bergman has returned to his former hunting ground in Stockholm with a production of Shakespeare's *King Lear* that has given his colleagues and audiences at the Royal Dramatic Theatre the treat of a lifetime. With the help of a new, easy-to-understand translation by the poet Britt G. Hallqvist, and a stunning decor, sets and costumes by Gunilla Palmstjerna-Weiss, Bergman has again proved himself to be Sweden's most gifted theatrical director.

Bergman has used the tragedy of blind despotism as a lesson to those who, dressed in a little brief authority, bungled the "Bergman affair." Wrongly accused of tax evasion, Bergman took umbrage and chose voluntary exile after a nervous collapse, despite an official retraction and apology. Eight years later, he is back with a vengeance to strike a moral blow against all usurpers of power and destroyers of mankind. That is the lesson of his *King Lear*, which carries three clues in the text.

The first clue lies in the "world of fools" that Bergman brings to life in a 15-minute prologue on an open stage, empty except for a blood-red back wall (recalling his *Hedda Gabler*). On it some 70 players, clowns, mimes, singers and medieval mountebanks dance and tumble, while Lear and his retinue go through the paces of a stately pavane to Daniel Bell's courtly music.

The cast is mobilized the whole evening, with extras taking up positions on the forestage as observers. Courtiers and servants wearing various shades of red, or soldiers in black, act as footstools, chairs, walls, a throne, or a frieze.

The second clue, "more sinned against than sinning," explains Lear's irrational behaviour. Many of Bergman's familiar obsessions are brought into play; the play within the play, the worlds of religion and sex, the lust for power and earthly possessions. Strangely, this world is reminiscent of Strindberg's *A Dreamplay* and of Indra's daughter's cry of sympathy for suffering mankind. Lear's crown, cast aside and spotlit down centre-stage, sets the tone – lying untouched except by Jan Olof Strandberg's whimsical Fool, who accidentally stubs his toe on it.

It is possible to follow the text in the programme, where every cut and transposition is marked. How odd to find Lear's storm-scene monologue largely cut! His distressful agony appears, however, in the remaining dialogue and in the tape of a searing wind, harbinger of a different sort of cataclysm. The final clue comes when Edgar speaks the last lines of the tragedy. He and Albany draw swords and exit, sworn enemies, as a shattering explosion brings the entire paraphernalia of the stage crumbling to the ground. Bergman's vision of Doomsday could not be more telling.

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Soviets play a waiting game

THE SOVIET UNION has just dealt a double rebuff to two Western arms control initiatives, one on banning chemical weapons and the other on reducing the numbers of troops and their conventional weapons in central Europe. Moscow clearly calculates that it has nothing to lose by denying President Reagan during his re-election bid a successful arms negotiation to brandish before his electorate, and everything to gain from heightening tension further in Europe and trying to push Nato governments into concessions.

But by stonewalling so bluntly in the only two arms control negotiations in which it is still involved—since it walked out of the nuclear arms talks last autumn—the Kremlin now runs the clear risk of doing fatal injury to the "peace" image it has so assiduously tried to cultivate in the West.

Even allowing for the usual scepticism with which East and West greet each other's moves, initial Soviet dismissiveness has been categoric. Of the U.S. proposal on chemical weapons tabled by Vice-President Bush in Geneva last week, Tass said it did not contain "even a hint of change in the old obstructionist approach" of the U.S. It is true that the main novelty of the U.S. plan is for inspection at short notice—24 or 48 hours' notice, say U.S. officials—of chemical weapons production sites, and that the Soviet Union, congenitally allergic to any outside intrusion, was sure to take exception to this. But from any cursory study of the arms control debate in the U.S. in recent years, the Soviets must know that verification has become the key issue and that without adequate verification, no agreement stands a chance of negotiation or ratification in the U.S.

Concession

The second Soviet criticism—about the proposal which Nato tabled in the mutual and balanced force reduction (MBFR) talks in Vienna—has even less force. The Kremlin has complained, through Pravda this time, that the Nato plan reflects "not even the semblance of an intention" to bridge the disagreement over Nato and Warsaw Pact troop levels which has stalled MBFR for the past 10 years. The West has long contended that the East has 180,000 more troops than it has. Now, Nato has offered to narrow the gap by, first, excluding service support forces (the Warsaw Pact apparently has more bottle-washers and their ilk in uniform) and, second, to accept a certain discrepancy in troop counts.

It can be argued that the chemical weapons and MBFR talks are essentially peripheral to the far more pressing concerns about nuclear arsenals. MBFR has been in stalemate for a decade—so why worry about a few more years? The Gulf war has reminded people how abhorrent chemical weapons are; yet they are eclipsed by the even nastier nuclear weapons which the super-powers possess.

But when diplomacy in the central core of nuclear arms control ceases, the peripheral issues become inevitably more important. And without a successful arms negotiation for the past 12 years—since the Salt 1 accords in 1972—arms control badly needs to show some achievement soon.

Though the Easter holiday has opened the season for this year's bigger anti-nuclear demonstrations in Western Europe, there seems very little likelihood that Nato will reverse its deployment of medium-range U.S. missiles, for the simple reason that the U.S. negotiations with Moscow over these weapons are dead. A skeleton team of U.S. negotiators remains in Geneva. But senior U.S. officials have concluded that the Soviet Union has not been prepared to negotiate seriously over the medium-range missiles for the past two years, and that the Kremlin is playing a long-term waiting game. The Soviet hope seems to be that not only might the U.S. election bring to power a Democrat more congenial than Mr Reagan but, even more important, that the next West German election might bring in a Social Democratic party committed to total removal of U.S. Pershing missiles from German soil.

This is obviously a gloomy prospect for the West. It might increase public pressure on Western governments to woo the Soviet Union back to the nuclear negotiating table with further concessions, and it could aggravate tensions between the U.S. and Western Europe. But the important point is that a waiting game cannot possibly succeed for the Kremlin, if it says "nyet" to everything. It will lose its one real weapon—a claim on Western public opinion.

A policy for UK airlines

BRITISH AIRWAYS has become overwhelmingly dominant in the UK airline industry as a result of historical accident and government policies rather than of commercial prowess. This is the central theme of a lucid analysis of airline competition policy published by the Civil Aviation Authority. The independent airlines, whose concern for their fate after BA is privatised next year prompted the Government - commissioned study, will be encouraged by its emphasis on the benefits of competition. For its part, BA will be relieved that the Authority in its interim report does not appear to favour anything so radical as the complete reshaping of the airline's route structure along the lines proposed by British Caledonian.

Handsome profits

As things stand, BA enjoys a total monopoly on all international scheduled services by British airlines from Heathrow —which is, by far, Britain's most attractive and popular airport. Even at Manchester, the main airport outside London, BA is almost supreme.

International passenger scheduled services account for 61 per cent of the British industry's output: BA's share of this sector is 82 per cent. The Authority admits that the handsome profits which BA earns on some intercontinental routes would leave it well placed, once *liberated from state ownership*, to become a predator on domestic routes. "Despite the regulatory constraints, it could deploy this market power, almost at will . . ." It is for fear that BA will steal their business that many independent airlines reluctantly opposed substantial freeing of controls on domestic routes.

The general thrust of the report is that BA's market power needs somehow to be reduced before privatisation. But how? The main problem is to ensure that greater domestic competition does not damage *the British industry's* ability to compete abroad. Earlier attempts to build up British Caledonian as a viable second force have had only very limited success

If routes were transferred from Heathrow to Gatwick in order to bolster BCal, the net result might merely be to enhance the competitiveness of those foreign airlines which are firmly established at Britain's premier airport. Moreover, foreign airlines would not permit two British carriers on many international routes.

It seems unlikely, then, that anything very drastic can be done to allow existing private sector operators greater access to BA's international routes—highly competitive on the North Atlantic, highly cartelised to most other destinations. The present policy of the CAA, encouraging a gradual increase in indirect competition—for instance, in allowing BCal a route to Riyadh, competing with BA's services to other Saudi destinations—will probably be continued. If, of course, a privatised BA cuts service unduly on some of its less desirable existing routes, as is possible, the Authority should, as it suggests, make it easier for rivals to take over.

However, the real core of the problem is how to ensure that the privatisation of BA helps rather than hinders the introduction of real competition where it is lacking at the moment—internally, and in Europe, should the EEC Commission eventually get its way by imposing the competition articles in the Treaty of Rome.

This is a problem which the Authority cannot solve on its own; it can only ensure (and that with difficulty) that if greater competition is permitted, there must be wider access to Heathrow and provision of a greater role for Gatwick in the international arena. What it cannot guard against is the cross-subsidisation of BA's domestic and charter operations from its most profitable international routes. If there is to be a level playing field for domestic competition, this must be ruled out from the start; the obvious way would be either to hive off these operations into a self-contained, self-*accounting division, or float* them off separately. It is not a question the Government can avoid if it wants to follow where the CAA points, to greater competition.

THE BUSINESS CAR MARKET

Montego: a vital new link in the BL revival plan

By Kenneth Gooding, Motor Industry Correspondent

HIGH IN the hills behind Nice, in the South of France, two British salesmen and their wives taking an early holiday stumbled accidentally into the middle of the Press presentation of Austin Rover's new car, the Montego.

They were favourably impressed by the car, a conventional saloon with a big boot, which Austin Rover slots into its range, between the Maestro and the Rover, from today.

The reaction of the salesmen is significant because they are typical of the customers Austin Rover is seeking for the Montego, a member of the same "family" of models as the Maestro — a family developed and brought into production at the cost of £210m.

The Montego is the latest important link in the "product-led" revival of BL's car business which began with the Metro, introduced in 1980, and was reinforced by the Maestro, launched just over a year ago.

It was on these cars that Sir Michael Edwardes, the former chairman, based the recovery plan that is designed to make Austin Rover profitable by the mid-1980s. The company seems to be on target for this. Figures released last week show Austin Rover made a £2m profit at the operating level in 1983, compared with a 1982 loss of £103m.

Sir Michael would have liked the Montego to have started the programme because it gives Austin Rover the opportunity to capture a substantial share of the company car fleet market.

As it was, work on the Metro was too far advanced when he arrived at BL for such a major change of plan. Instead it was General Motors' Vauxhall-Opel subsidiary that broke dramatically into the market with its Cavalier, which now competes with Ford's Sierra as the most popular model with UK business buyers.

These are the two cars the Montego must catch if it is to succeed. But it will not be easy: the American rivals are already locked in a tremendous battle for British customers.

Austin Rover is hoping that the Montego will quickly push up the company's UK car market share from 18.5 to well over 20 per cent—a figure it last held in 1978. The company's car output would be boosted by nearly 120,000 a year, rising above 500,000 for the first time since 1979.

The launch of the Montego will enable Austin Rover to *complete the £147m re-equipment* of the Cowley, Oxford, assembly plant, placing it alongside the company's other facility at Longbridge, Birmingham (home of the Metro), as one of the most efficient in Europe.

Mr Harold Musgrove, Austin Rover's chairman, says: "Metro was the key to our survival. Maestro was the key to our success. Montego is the car which opens the door to the largest and most important sector of the European market."

However, the truth is that Montego is very much aimed at the British market, rather than the rest of Europe where Austin Rover is still struggling to re-establish itself. Its only significant territories last year were France, with sales of 30,000 cars, and Italy (27,000).

The new car's main rivals in Europe include the Sierra, the Cavalier, the Audi 80, Volkswagen Passat and Renault R25.

The car is aimed squarely at *the so-called upper medium* sector of the market, which accounts for more than a quarter of total sales throughout Western Europe. In Britain it is dominated — uniquely — by business buyers: over 60 per cent of the cars in the sector are bought by corporations or partnerships rather than private individuals.

No company can hope to gain much extra market share in the UK unless is can capture a good slice of the upper medium sector by winning the support of the company buyers. Austin Rover has not had a strong contender for 16 years—*since the Austin Cambridge/Morris Oxford* went out of production. The Princess, later renamed Ambassador, was a dismal failure.

The sector has another important characteristic: even though the cars are company purchases, over half will be driven by employees who have a say in the choice of model their organisation chooses. To the trade they are known as "user-choosers." These are the people Austin Rover has to impress with the Montego.

To help Maestro when it was launched last year Austin Rover made a series of presentations to about 12 companies with big car fleets and where employees were "user-choosers." Maestros were put on display at the companies and employees could take part in ride-and-drive tests during working hours.

A similar approach will be used for the Montego. Between 120 and 150 presentations will be mounted.

Austin Rover's sales to the fleets dropped to between 12 and 15 per cent of the total "business car" market by the end of the 1970s because it had no suitable models to offer. But it claims that during the past year or so its share has crept back up to about 17½ per cent, thanks to the efforts made with Maestro.

As for the total car market, Austin Rover wants to regain and hold a minimum of 20 per cent in the mid-1980s. Optimists within the company believe that its share could be running at 23 per cent by the end of this year if the Montego does its job.

The companies which merged to make up Austin Rover once regularly took 40 per cent. The share was down to 23.5 per cent by 1977 when Sir Michael Edwardes moved in to speed up the investment programme from which the Montego emerged. It had dropped to only 17.2 per cent by 1980, when the launch of the Metro gave a respite from the downward spiral.

The Maestro did more than stabilise the company's position. In 1983 Austin Rover put up its best car sales performance in Britain for four years with volume up 20 per cent from the 1982 level at 322,000.

Output from the company's two car assembly plants at Cowley and Longbridge reached 453,000, the best for 10 years, to put Austin Rover even further ahead of Ford (with an output of 318,000) as Britain's leading car producer.

Austin Rover as also been reshaping its UK dealer network so that its new models do not suffer from an ill-prepared retailing operation.

During 1982-83 it gave notice to about 200 dealerships as part of a streamlining operation designed to restore its dealer network to profitability. The company estimated that in 1982 half the 1,640 dealers incurred losses, 30 per cent broke even and only one in five was profitable.

On every past occasion that Austin Rover cut its network it lost volume and market share. But it now thinks that new products such as the Maestro and Montegu can bring increased volume sales to a reduced number of dealers—and the increased volume per dealership should make each one profitable.

The company is also setting up a group of between 100 and 125 dealers within the total network to be fleet specialists.

However, Mr Jeff Johnson, Austin Rover's fleet sales and service director, says the dealers chosen will need to span the total business because profit margins on fleet sales are very slim. "Dealers will need a good, profitable business in retail sales and in sales to small fleets with under 25 vehicles where margins are better."

The final steps in strengthening Austin Rover's UK dealer network and the arrival of the Montego more or less coincide. But has the company left things too late?

One indication of the huge task facing Austin Rover dealers is given by Mr Mark Snowdon, the company's managing director, commercial, when he points out that nearly every Montego sale will have to be a "conquest"—that is one made at the expense of a competitor rather than a substitute for another Austin Rover model.

Is there room for a third, major contender alongside the Sierra and Cavalier? First soundings among the fleets suggest there is.

At Boots of Nottingham, *which at present has a fleet of* 600 Ford cars and a diminishing number of Austin Rover models, Mr Gordon Lumdis, deputy distribution manager, says: "I'm impressed with the Montego and if Austin Rover's information about the car is 95 per cent accurate we are interested. After all, it's British and it's our money. If it succeeds we all benefit."

Mr Geoff Becque, marketing director of Interleasing, which operates a fleet of 12,500 cars under contract hire and leasing schemes, says his company will buy 80 Montegos a month. That compares with about 140 Sierras and 120 Cavaliers purchased for Interleasing clients.

He maintains: "I think there is a pent-up demand from fleet users to buy British where they can — and that means buying from Austin Rover. As long as they can put it together correctly and it is reliable Montego will do well." I would not be surprised if Montego took one-third of the business sector eventually. With the Sierra, Cavalier and Montego to choose from, many buyers will go for the one backed by the UK taxpayer."

All the fleet executives stressed that Montego would have to be absolutely reliable if it was to capitalise on the initial good will and "buy British" sentiment.

Again, the omens are good. So far Maestro has proved to be among the more reliable cars available to the fleets. Montego uses the same steering, braking and suspension systems as Maestro and many other common components, as befits cars in the same "family."

About 60 per cent of the Maestro's body shell pressings are used for Montego as well. Yet Austin Rover has arranged things so that the only recognisable exterior body features common to both cars are the lower door panels. Most of the commonality is in the hidden structure of the body.

Mr Musgrove points out that by having a "family" of cars the substantial costs of bringing a new model from initial concept to the showroom have been spread much further.

Without the "family" concept it would not have been economic to have spent the £147m which has turned Cowley into one of Europe's most modern car plants and which, in turn, should make it one of the most productive.

The production facilities are highly flexible so that Montegos and Maestros can be mixed on the same production lines to match demand.

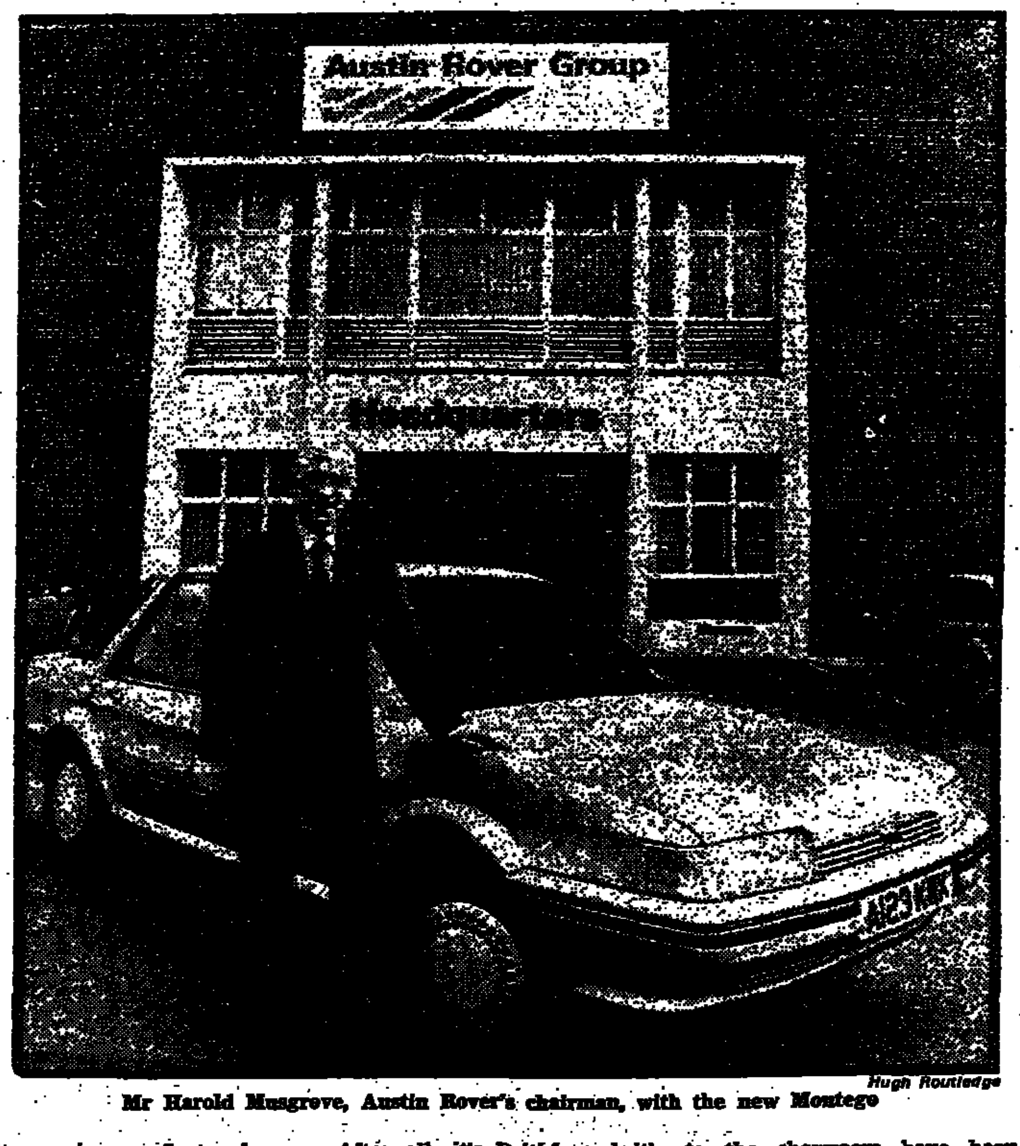
Austin Rover hopes Montego output will rise quickly to 2,700 a week (120,000 a year). Maestro production should take the total to 5,000 a week or a respectable and economic 225,000 a year. The last time the Cowley plant produced over 200,000 cars in a year was 1972.

Mr Musgrove believes Austin Rover's car output from its two plants could therefore reach nearly 500,000 in 1984, up 13 per cent on 1983. He says that by the end of 1986, when the group will have given the Metro—produced at Longbridge, Birmingham—a substantial "facelift" and the joint-venture car developed with Honda, the XX, will be on stream, production will be running at an annual rate of 600,000.

But Mr Musgrove insists that he will not go chasing volume and market share unless it can be achieved profitably.

He says: "Montego will be good for our image both at home and on the Continent. But the most important boost for Austin Rover would be if customers could believe it is a company with a future and that it has a future which will be profitable.

"We need profit not only to pay for the next generation of cars; we need profit for the sake of our image."



Hugh Routledge

Mr Harold Musgrove, Austin Rover's chairman, with the new Montego

THE UK MARKET LEADERS

ANNUAL CAR REGISTRATIONS

	1977	1980	1982	1983
Ford	340,068	464,587	474,059	518,003
Austin Rover	311,189	267,357	268,124	322,445
Vauxhall	120,600	109,218	174,183	258,410
Datsun	82,133	91,893	93,213	104,484
VW/Audi	45,958	68,285	92,435	100,727
Renault	55,862	88,343	64,147	62,923
Volvo/DAF	21,779	38,283	51,707	61,250
Talbot	79,725	90,874	56,149	56,537
Fiat	66,015	45,267	43,638	46,254

Source: Society of Motor Manufacturers and Traders

Men and Matters

Trouble in the numbers game

The United States is a nation of numbers. From the weather to baseball results Americans love statistical comparisons.

But it is when big business numbers are analysed that the rivalry to rank the rankings really begins.

The major business publications in the U.S.—Business Week, Forbes and Fortune—have all become accustomed to ranking the corporate giants of the business world in different ways—with the Fortune 500 list generally accorded most prestige in this specialised game.

But this year the spring listings have been enlivened by a bitter offensive by Forbes, the well-regarded U.S. business magazine, challenging Fortune's supremacy. Forbes has kicked off the attack with a blistering piece in its new issue on the business listings competitors, written by Forbes editor himself, James Michaels.

Michaels claims that the Forbes 500 which ranks the largest U.S. companies in four different ways, is "in a different class from the superficially similar corporate directories produced by our competitors."

Turning to Business Week's Scoreboard Special, Michaels concedes that it arrives on the news stands a month before either the Fortune or the Forbes listings—"But only because it used lots of statle figures." You can hardly get nastier than that.

Business Week has hit back to claiming: "All the key indicators of corporate performance are for 1983." According to Business Week the Forbes magazine is trying to make a virtue out of being late with the news.

"Silly results"

Michaels of Forbes reserves his most cutting comments, however, for the Fortune 500, which, he says "contains a conceptual flaw which leads to silly results."

That is rather like claiming that the Statue of Liberty is listing heavily to starboard. But the Forbes argument is that the Fortune 500 lists only industrial companies—the service sector is dealt with in a subsequent list in a later edition. Michaels of Forbes says that his point is proven by the fact that AT and T, the U.S. telecommunications giant, and Sears Roebuck, the world's largest retailer, do not make the Fortune 500.

In fact the AT and T technologies division—the part of AT and T left after stripping out its telephone calls business—is listed as number 26 on the Fortune list. The group as a whole ranks number 3 on the Forbes assets table.

Michaels claims that making a distinction between "service" and "industrial" companies may have been valid in the age of steel and locomotives, but has little meaning in the post-industrial economy.

Fortune has sprung to its own defence by arguing that its lists contain more information for investors than efforts by rival magazines.

"We don't take the Forbes list that seriously around here," said one Fortune editor, damning with faint praise.

"Sold 10 already—and everybody paid in £50 notes"

Your chances

Have you considered the probability lately of being caught in a flood or hit by a falling aircraft? While both are fairly unusual occurrences a good deal of scientific effort is being put in to measuring such actual risks as these—and other rare but unpleasant happenings.

Curiously you would be 22 times safer from flood danger anywhere in Holland than in the U.S. Anyway, that is what is claimed by Det Norske Veritas, the Norwegian ship classification society which has been working for the last 10 years on the evaluation of potential risks.

As to the chances of being hit by a falling aircraft—it is five times more likely to happen to you in the U.S. than in Britain according to the society's table, "individual probability of fatal injury per year of exposure."

The two examples make the U.S. sound a dangerous place. But even there your chances of being drowned in a flood or squashed by that aircraft are assessed as only one in ten *million*.

The society does not pull any punches about life in Norway. You are 40 times more likely to be killed by a natural disaster there than to be hit by lightning in Britain.

Eastern call

Grindlays Bank, whose symbol is an elephant, has had a branch in India since 1854 — and 130 years of business dealings, has finally made its mark on the boardroom.

The bank has appointed its first Indian managing director, Ashok Dayal. He will be taking up a new post in Hong Kong, in charge of South Asia and the Pacific, a territory that stretches from Korea to Australia.

"It's a tribute to him and to the bank that it can attract people of quality," says Alec Ritchie, chairman.

Dayal joined Grindlays in India straight from university in 1957 and worked his way up, including a spell in London, to reach his latest position of regional director for India, Sri Lanka and Bangladesh.

Dayal will be, in fact, the first managing director of Grindlays who is not either an Englishman or an American (Grindlays is majority owned by Citibank) even though it has a profusion of branches around the world.

But others may be on the way. "The word expatriate really means something at Grindlays," says Ritchie. "We have Frenchmen in Africa, Africans in Asia, Chinese in Africa, and Indians in many places. It doesn't just mean people posted abroad from the UK."

Beware of the dog

Like most south coast towns, Budleigh Salterton, Devon, has a high proportion of the elderly and infirm among its population—animal, as well as human.

But their needs are borne in mind. A holiday visitor reports seeing this sign last week in a narrow lane off the Exmouth road: "Please drive slowly—dog is deaf."

Observer

HONG KONG'S FUTURE

How China got its way

By Robert Cottrell in Hong Kong

THE VEIL of secrecy covering Hong Kong's future was lifted just enough last week for Sir Geoffrey Howe, the Foreign Secretary, to tell the territory that its days of British administration are numbered. In 1997, when Britain's lease over most of Hong Kong expires, British authority will cease, and the colony will become once more a part of China.

"The Chinese government," Sir Geoffrey said, "have made it clear publicly that they recognise the special circumstances of Hong Kong, and that they want its social and economic systems and lifestyle—in many ways so different from those of mainland China—to remain unchanged. We share with the Chinese Government the strongest possible common interest in these objectives."

Amid the confidence and enthusiasm marking this final leg of Sino-British negotiations, it would be easy to assume that this is exactly what Britain has been negotiating for ever since Mrs Margaret Thatcher, the Prime Minister, went to Peking and raised the Hong Kong question in September 1982.

The fact is, however, that the settlement now in the process of being reached contains precisely those elements which produced such fear and volatility in Hong Kong only a few months ago—withdrawal of British administration, and the subjection of the territory to Chinese sovereignty with only a paper agreement to separate the territory's liberal capitalism from China's socialism. What has changed?

To start with, the Hong Kong issue has been an extraordinary public relations triumph for China. Its tactics have been an unsophisticated stratagem of carrot-and-stick, but far in advance of Britain's silent shuffling.

While Britain was observing the confidentiality which it was agreed should surround the Sino-British negotiations China was announcing regularly through quasi-official channels the state of the talks, the good fortune which would be Hong Kong's under Chinese sovereignty, and the perils of supporting a continued British administration.

China had the immense negotiating advantage of a simple declared objective—reunification of the motherland, described as a "sacred duty" in the preamble to the Chinese constitution.

Britain, by contrast, has been negotiating on behalf of a territory which it manages at arms' length, in which it has no direct economic interest, and which has itself no substantial democratic means of expressing an opinion of its own.

With the coming into force of the British Nationality Act, Britain publicly underlined the limits of its commitment to the people of Hong Kong while in the middle of negotiating their future. This, together with rows over overseas students' fees, and the negotiation of world textile quotas, in which the interests of Britain and Hong Kong were opposed, did nothing to win popular sympathy for Britain in the territory.

Until Mrs Thatcher's visit 18 months ago to Peking, Chinese leaders had set out two objectives: resumption of sovereignty and maintenance of Hong Kong's prosperity.

It seems unlikely that China would have been willing to negotiate some indefinite form of continued British linkage but Mrs Thatcher's public defence of the legality of Britain's claim to sovereignty over Hong Kong effectively foreclosed that option. From that point onward, China's two main objectives seemed to become: resumption of sovereignty, and the ousting of British administration.

China appears to have conceded nothing of significance at the negotiating table. In July 1983, when regular rounds of formal diplomatic talks began, Chinese leaders issued a "10-point plan" for Hong Kong to a delegation from the Hong Kong Federation of Students (HKFS) on a visit to Peking. The HKFS document is regarded as containing the basics of the settlement which Britain is likely—a year or so later—to initial.

At first, Britain argued that a continued British-linked administration would be the best guarantee of maintaining Hong Kong's "stability and prosperity."

Even then, Britain probably saw its role in Hong Kong being very gradually phased out. But it wanted this to be done over the long term, without a deadline only 14 years away.

China's public anger at Britain's proposals strained the confidence of Hong Kong's businessmen and investors, culminating in the collapse of the Hong Kong dollar in September 1983, which in turn helped bring down a local bank. Both the dollar and the bank were eventually rescued, but China's evident willingness to jeopardise Hong Kong's social and economic stability persuaded Britain to drop its own plans for continued British administration.

The game was effectively over. China had prevailed.

Britain appears to have nursed some hopes early on that China's promises of autonomy to Hong Kong could be in some way "guaranteed," though quite how is not clear. To judge by Sir Geoffrey's comments on Friday, Britain is now looking for "assurances" rather than "guarantees"—those assurances would amount simply to the publication of China's promises in the form of a detailed agreement between the two countries.

China would prefer a shorter, more general, more abstract document. It regards the "basic law" of post-1997 Hong Kong as something to be drawn up by China in consultation with the people of the territory, not as something to be negotiated by Britain in exchange for a cession of sovereignty.

It is therefore far from certain, that Britain will get as detailed an agreement as it might like on Hong Kong's future. But if this situation seems more "acceptable" to Hong Kong than it did two years ago, it is probably for several related reasons:

● China convinced Hong Kong relatively early in the negotiations that a cession of British sovereignty and administration was inevitable.
● China greeted any British opposition to its plans with outbursts of public anger calculated to frighten Hong Kong and destabilise its financial markets.
● Hong Kong people are so tired of uncertainty that the prospect of a settlement is welcome if only as something to plan towards.
● At least China will not touch Hong Kong until 1997, leaving 13 more years of the status quo.
● To some Britain has seemed weak and aloof while China's strength has been clear for all to see.

Britain has no real negotiating cards left to play now—not even withholding its approval of an agreement. China has set its September deadline, not necessarily for reaching an agreement with Britain, but for announcing unilaterally its own plans for Hong Kong's future if agreement has not been reached. If anything, Britain may need an agreement more than China, if it wants a sure and stable basis on which to rest its administration of Hong Kong until 1997.

When an agreement does come, it may be as much what is left unsaid, as what is said, which will determine how well the territory works after 1997. The agreement will no doubt promise Hong Kong people a succession of "freedoms." It is not likely to mention in passing that such freedoms are already promised to China's people under China's existing constitution, but go unobserved in what remains a totalitarian State.

The agreement may promise Hong Kong a "democratic" government—though Sir Geoffrey spoke on Friday of a "representative" government, and ducked a request to distinguish between democracy and representation. If so, it will be worth bearing in mind that Xu Jiatun, Pekin's senior representative in Hong Kong, has said that socialism as practised by China represents democracy in its widest sense.

The agreement is likely to include words to the effect that China will not send down cadres from Peking to interfere with Hong Kong's autonomous government. But it can hardly speak of other, more subtle, ways of influencing the territory through fear or favour.

What of Peking's already-extensive business presence in Hong Kong? Will such firms, and their respective ministries, be able for example to restrain themselves from using political "clout" in commercial transactions?

By the time any Sino-British agreement on Hong Kong's future comes into force, it will already be 13 years old. Most of the administrators who negotiated or ratified it will have retired. Hong Kong's autonomy will ultimately depend not on negotiations, nor agreements, but on the strength and impartiality of its future administrators, and the extent to which those virtues command respect in Peking.

A Hong Kong street scene *Ashley Ashwood*

High Tech Export Controls

Why the U.S. must not go overboard

By William Carey

THE REAGAN administration is persuaded that Soviet military power has profited greatly from advances in U.S. scientific research and development as a consequence of porous export controls, industry's foreign sales practices, a prolific research and trade journal literature, and imaginative and well-targeted Soviet bloc spying.

In an effort to stop the alleged leakage of technology, vigorous steps are being taken despite resistance from university scientists and high technology leaders who argue that the planned safeguards will stifle the creativity upon which the nation's military and economic strength rest.

The government plainly means business. Scientific and engineering societies have had their conventions and symposia derailed by last-minute government demands for the suppression of unclassified papers. Meetings open to invitees from communist countries have been put under surveillance. Points of embarkation have been scenes of random personal and cargo searches and confiscation of property being taken out without benefit of export licence. Universities hosting students or researchers from countries have been requested to isolate such individuals from less, some determined exporters of end products or components have succeeded in eluding government vigilance and friendly third-country agents have in a number of cases caught illegal shipments almost at the border of the Soviet bloc.

Is it a haemorrhage or a trickle of militarily-useful American technology and knowhow that is slipping through the barrier? The facts are difficult to pin down, apart from a guarded anecdote here or there. Hints from the U.S. intelligence community describe elements of Soviet military hardware whose capabilities closely match advanced American weapons systems, leading to wry jokes to the effect that Congress appropriates funds to improve both U.S. and Soviet arms. Anecdotes are scarce, however, to nail university-based research as a significant part of the problem.

Industrial firms, competing as best they can with Japanese and other skilled producers of high technology for international sales, ask how they can hope to survive without incorporating "the better idea" into their products even at the risk of these products getting into the wrong hands via the marketplace. At the same time, industry spokesmen contend that disclosure of critical design information, of strategic value to the Soviets, is already blocked effectively at the point of origin for proprietary reasons.

To these objections the U.S. Department of Defence has turned a deaf ear. The Soviet adversary is formidable and resourceful. Interdiction of the outflow of information, by every available means, is called for. So the argument goes, and if the legal powers to deprive the adversary of the fruits of an open society are insufficient, Congress will be asked for additional powers. Here a difficulty arises, because proposals to amend export legislation invite serious conflicts between protectionist and free trade factions. Thus, an otherwise routine extension of the Export Administration Act is still stalled while controversy besets Administration proposals to tighten controls.

A common difficulty in perception: the acceptability of risk

To a degree, issues of information control and arms control turn on a common difficulty in perception: the acceptability of risk. While experts tend to agree that complete verification is an unattainable ideal in the context of complex arms control agreements, the bogy of zero risk haunts politicians. Where information is concerned, and the prize is knowledgeable, the element of risk tends to be debated in black and white terms, with a moderate wing arguing that the only discernible risk in disclosing unclassified information lurks in a few grey areas such as microelectronics and encryption.

For a country rich in scientific and technical assets and contemplating an aggregate national effort in research and development exceeding $100 billion in the approaching fiscal year, a sensible balance between openness and security should be manageable via selectivity—pinpointing information where the perceived utility to Soviet military and space interests is both real and confirmed by intelligence estimates.

That is far from the case when the enumeration of "militarily controlled technologies" subject to export controls fills a 700-page book (which itself is classified). Nor is there much balance when research scientists supported by government funds face stiff obligations to submit drafts of papers for government comment or approval prior to publication, even though their work is unclassified. It is even becoming doubtful that scholars, business executives, or ordinary tourists will be permitted to travel abroad with state-of-the-art personal computers lest they fall into the wrong hands. Finally, proposed regulations incorporate an explicit presumption that any form of public disclosure "is tantamount to export," a declaration well-calculated to conjure fantasies of heavy fines or jail terms.

Overprotection, should it come to pass in its more extreme version, carries a price. Leading American centres of advanced scientific research may, by vote of their faculties, refuse to accept government funds which are accompanied by rules of prior restraint. Major industrial firms which carry out leading-edge unclassified research and development on products or processes of a "dual-use" kind (interchangeable as between industrial and military applications) may encounter frustrating procedural delays before their products can enter the stream of trade.

In attempting to deny information assets to the Soviet bloc, the regulators may likewise deny them to the markets of friendly countries, or at the very least bestow sales advantages to competitors of U.S. industry. Whether the burdens imposed in the interests of the national security will, over time, put a self-imposed brake on the productivity of U.S. fundamental and applied science, notwithstanding rapidly-rising public and corporate investment, is a deeper and more troubling question which, thus far, has been raised but not conclusively answered.

William Carey is Executive Officer of the American Association for the Advancement of Science.

Letters to the Editor

Marx, Lenin and Scargill

From Mr D. L. Stewart

Sir,—In saying (your Leader of April 13) that Mr Scargill is an "old-fashioned left-wing militant" you are following an almost invariable practice of the British Press when discussing socialist politicians. This is to use general and imprecise descriptions instead of the specific terms which identify different forms of socialism.

The best deduction that I can make from Mr Scargill's words and deeds is that he is a Marxist-Leninist. Those who leave Communist parties are normally excoriated as traitors, but he seems to have left the British Communist Party on the most amicable terms, becoming its preferred candidate for high office in the NUM.

In international relations he has taken the NUM out of its contacts with corresponding unions from the Western democracies and into an organisation dominated by unions from countries with Marxist-Leninist systems.

He describes the Soviet Union as a country which has "established socialism," a statement made only by Marxist-Leninists or their very close sympathisers, by those who wish to denigrate all forms of socialism by equating it with the Soviet system, and by political innocents.

An "old fashioned left-wing militant" might, like a Marxist-Leninist, try to use the organised power of the working class to establish his own version of socialism. But there would still be a fundamental difference between them. The Marxist-Leninist view of trade unions is that in "capitalist" countries they should be entirely independent and a major weapon in the overthrow of the system.

But once "socialism is established" the union undergoes a sea-change. It retains a certain role in informing the ruling party of working class opinions and aspirations, but its principal function is as a transmission belt for the party's decisions.

It should be no surprise that Mr Scargill considers Solidarity in Poland to be "anti-socialist"—if you equate socialism with Marxist-Leninism it certainly is — nor that he is totally opposed to industrial democracy in the form of workers' participation.

What does surprise me is that I have seen him interviewed many scores if not hundreds of times on TV and heard some hundreds, if not thousands, of questions put to him, yet I have never heard anyone ask him what kind of a socialist he is.

D. L. Stewart.
Salachail,
Appin, Argyll.

Growth of OTC trading

From Dr Stephen Castell.

Sir,—With reference to Richard Lambert's timely and illuminating article on NASDAQ and the rapid (Information Technology-based) growth of OTC trading in the U.S. (April 16), I would take issue on one point he made: "Yet London has a valid reason for hesitating before plunging along the NASDAQ trail . . . . Some 300,000 people are licensed with the NASD to sell securities. The market's efficiency depends on this enormous spread of investor interest—which could not be matched in the UK."

The 300,000 can apparently deal in 4,125 NASDAQ stocks—an average of 72.73 dealers per stock (crudely). Currently, 13 licensed dealers in the UK make active markets between them in 145 UK OTC stocks—an average of 0.09 dealers per stock (again crudely).

The U.S. dealer average addresses, by all accounts, 42m private direct shareholders in stocks—thus, 1.73 dealers per stock, per 1m investors; whereas the UK's average addresses, at the moment, only 1.6m individual shareholders, thus 0.06 dealers per stock, per 1m investors.

The U.S. spread of investor interest is thus some 31 times that possible with regard to OTC stocks in the UK at present. So far so good.

But with the structural changes now taking place in our financial services and other sectors, we might easily see the branches and offices of banks, building societies, solicitors, as well as "job-brokers," all seeking to qualify, *inter alia*, as "one-stop (electronic?) stock shops"—a new stock retailing/dealing/distribution power of potentially some 13,000 outlets, in my conservative estimation.

Whatever the reality of such potential turns out to be, it seems clear that it must have a dramatic effect on the UK dealer per stock, per investor ratio, and I should not be surprised to see it reach, within say four years, something approaching the U.S. figure of 1.73 (which might itself of course have moved on one way or the other by then).

In other words, one entirely believable UK scenario, *circa* 1988, might be: 6,500 licensed dealers per 500 OTC stocks, per 7.5m individual investors.

Thus we can indeed match the U.S. performance. The recent acceleration of UK OTC trading, and the (coincidental?) rapid restructuring of the City make it not just possible but highly probable. London need not, and will not hesitate to plunge along a suitably-Anglicised NASDAQ trail . . . .

Any government committed to the creation of wealth by *inter alia*, wider share ownership (7.5, not 1.6m individuals) in companies backed to support risk-taking and the spirit of enterprise (500 of them) should not hesitate to assist this plunge-taking and the speedy creation of a future BASDAQ) (British Association of Securities Dealers Automated Quotations System) to serve those 6,500 motley, competitive new BASD-licensed dealers. OTC traders all.

Stephen Castell.
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20 Grange Road,
Wickham Bishops, Witham, Essex.

* * *

From Mr R. Richards

Sir,—I was very interested in the article by Richard Lambert. Having lived in the U.S. and dealt in stocks and shares, I agree that the U.S. way would be much better for us.

Let us be honest. Most people who deal in stocks look for growth and an increase in the price of the stock they bought. Some could want to live off the dividends, but they are in the minority. We want to sell at a much higher price than we paid. Any investor worth his salt wants to see the prices, highs and lows, clearly marked every day.

R. Richards.
17, Shelley Road,
Worthing, Sussex.

Incentive effect of tax cuts

From Mr Henry Law

Sir,—Massive cuts in public spending, as suggested by Professor Minford (April 19), are not necessary to achieve the incentive effects of tax cuts. The problems caused by taxes are largely due to the government's choice of subjects for taxation.

When windows were taxed, the owners bricked them up, and in 1797 a tax on clocks and watches almost ruined a thriving industry before it was repealed in the following year.

Similarly, our present day taxes on labour lead to less work, while taxes on consumption reduce demand for goods and services.

Anyone seeking to reduce the inhibiting effect of taxation would do well to recall Adam Smith's observations that the only way of raising public revenue without depressing production is by a tax on ground rents; moreover, a tax on ground rent cannot be passed on.

In pratice, the government could achieve this by converting the local rating system to one based on site values, with the rate support grant being phased out and replaced by a nation equalisation scheme.

This would enable national taxes to be reduced by about £20bn, which would be more than enough to implement Professor Minford's proposed tax cuts without the need for corresponding cuts in welfare and social services.

Henry Law.
8, Woodhouse Road,
Hove, Sussex.

Interest rate conundrum

From Mr R. P. Heinemann

Sir,—David Hale's interesting article "The interest rate conundrum" (April 12) should be interpreted as a serious warning of the unsoundness of the present U.S. and world economic upturn.

With a general prospect of a rise in taxes in the U.S. after the Presidential election or inauguration, it is quite feasible that such tax increases to curb the Federal deficit will occur just at the time of escalating wage and commodity price inflation and a slowdown in growth.

This will tend to raise interest rates as the Government attempts to keep money supply growth under control. This in turn will hamper the return to viability of debtor countries because so much of their debt is at variable rates.

It is conceivable that in a few years, despite some improvement in the U.S. Budget deficit trend, the U.S. dollar could collapse on foreign exchanges as investors and holders of dollar denominated assets seek safer real returns in other currencies. It is therefore quite possible that the present modest economic growth in the developed world could come to an abrupt end as a resurgence of debtor countries' troubles becomes apparent.

A series of defaults or near-defaults, on debt owed mostly to U.S. banks, will force the Federal Reserve Board to bail out the major U.S. banks, adding to the money supply and feeding inflation further, pushing the dollar down yet further.

Recent monetary theory suggests that under certain circumstances such as a strong prospect of rapidly rising inflation and interest rates, an inflationary upturn can occur before actual money supply increases due to an upward shift in the speed of circulation of money.

R. P. Heinemann.
Little Manor,
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FINANCIAL TIMES
Wednesday April 25 1984

STRICT CONTROLS ON EVE OF ELECTION DEBATE

Tension increases in Brasilia

BY ANDREW WHITLEY IN RIO DE JANEIRO

TENSION mounted in Brasilia on the eve of today's congressional debate on the opposition parties' constitution amendment.

Its passage, which is not considered likely, would immediately restore direct presidential elections to Brazil and end 20 years of military-led rule.

Strict controls are in force on all access points, by air and road, to the capital, and on Monday, censorship of radio and television broadcasts from Brasilia and the surrounding region came into effect.

General Newton Cruz, the regional army commander in charge of policing the emergency measures introduced last week, has acted vigorously over the past few days to enforce his authority.

Troops yesterday surrounded Brasilia University, which has been temporarily closed, to prevent students holding meetings in its grounds. A group of town mayors, in Brasilia to demonstrate their support for the opposition amendment, were detained at the airport and confined to their hotels.

But for the armed forces, perhaps the most ominous development of all was the arrest of a serving army colonel who had issued a statement highly critical of the Figueiredo Government and the state of the country.

The arrest of Col Ary Canavo, who served with the third motorised infantry brigade in Goiania, followed the reading in the Chamber of Deputies on Monday of his statement. In it he attacked the "ever more frequent" appearance of "unpunished scandals" in the economy, and said the Brazilian people were "on the brink of despair."

Significantly, Goiania, the state capital of Goias, which surrounds the federal district of Brasilia, is one of the 11 cities under military control for the next two months.

The emergency measures, ostensibly implemented to permit the unimpeded working of Congress, free of external pressures, were strongly criticised yesterday by the Jornal do Brasil, a leading daily. It said they were "a sign of the worsening sickness of authoritarianism."

The political impasse between the Government and the opposition parties, meanwhile, shows no signs of being resolved, as both sides marshalled their forces ahead of today's debate in Congress.

The opposition's Bill is not expected to succeed, but Government tactics are still unclear. One possibility is that, after a defeat of the opposition Bill, it will immediately present its own proposal, to restore direct elections in 1988.

The officially-backed Partido Democratico Social, which controls the electoral college due to choose President Figueiredo's successor, yesterday reacted with hostility to the latest compromise proposal of an interim presidential mandate of two years, paving the way for direct elections in 1986.

Banks to push for payout of Manila deposits

By Emilia Tagaza in Manila and William Hall in New York

INTERNATIONAL BANKS are to continue to press for full repayments of their deposits frozen by Citibank's Manila branch, despite the partial payment announced on Monday by Citibank.

Although banks welcomed the Citibank move they pointed out that the underlying issue of whether offshore deposits are a sovereign or a bank risk has still to be resolved. They are continuing negotiations with both Citibank and the Philippine Central Bank with the aim of reaching an early agreement for full repayment of the frozen deposits.

A Philippine Central Bank official said yesterday it was hoped that the partial unfreezing of the Citibank deposits would pave the way for the resumption of the stalled negotiations for debt rescheduling with commercial bank creditors.

The freezing of deposits by Citibank Manila has led to considerable acrimony among international banks. Banks which had deposited U.S. dollar-denominated funds at Citibank's Manila branch have been increasingly frustrated by what they deemed to be Citibank's failure to honour its obligations. Citibank, for its part, has argued that it was simply abiding by the Philippine laws.

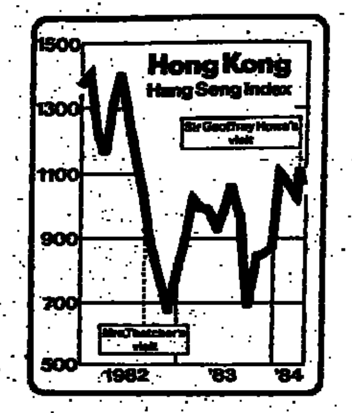
But the aggrieved banks point out that other banks which were in a similar position – Standard Chartered Bank, Bank of America and Hongkong and Shanghai Banking – have not imposed such a freeze. However, the amounts on deposit with these banks is relatively smaller. Such was the frustration of one depositor bank – Wells Fargo – that in February it filed a law suit in a New York Federal Court on behalf of its Singapore subsidiary for the recovery of its $2m deposit with the Citibank's Manila branch. Yesterday Wels Fargo said it would continue its law suit to recover the amount still outstanding, adding that "we would prefer the 100 per cent."

International banks operating in the world's interbank market, where billions of dollars of deposits are taken and lent each day, argue that the freezing of the deposits by Citibank undermines confidence in the interbank markets.

THE LEX COLUMN

A tiger in the Exxon tank

Yesterday's economic statistics from the U.S. confronted the foreign exchange markets with an awkward dilemma. A strong rise in durable goods orders underwrote the impression left by last week's revised first quarter GNP figures but the modest growth in consumer price inflation seemed, if anything, to be pointing the market in the opposite direction. It is perhaps some indication of sentiment that the market, still looking for a strong U.S. economy, plumped for the durable goods figure and marked the dollar higher.



Exxon

So far, so good for Shell and BP shareholders alert to first-quarter results from the U.S. oil majors. Yesterday, as BP's shares rose 5p to equal their high for the year at 505p, Exxon announced net profits up 40 per cent at $1.48bn on sales only 5 per cent higher at $24.9bn. As well as meeting Wall Street's most optimistic forecasts, this performance should underpin the more general confidence now evident in the oil sector.

Exxon's earnings owe next to nothing to stock profits and include no extraordinary gains; but they do incorporate a broad-based recovery of volume sales in most of the downstream markets it shares with the UK majors.

The most striking single feature of Exxon's first quarter, however, looks less cheering for BP. After the rapid rise in Exxon's North Sea production rate in 1982-83, the latest 16 per cent increase leaves Exxon – and Shell, its 50/50 partner – ahead of BP in the North Sea production league. At the same time, Exxon has lifted output from its lucrative Malaysian and Australian fields by 28 per cent. Overseas exploration and production profits at $730m have thus contributed a $144m upswing to net income and now look established at this new and significantly higher level.

In the U.S. upstream earnings have been less exciting despite higher natural gas production. They have indeed fallen, if allowance is made for a $100m exceptional provision taken in 1983. Downstream, though, Exxon's U.S. recovery from breakeven to $61m does more than acknowledge the passing of the 1982-83 gasoline price war and the impact of a hard winter on heating oil demand.

Exxon cut its staff by 10 per cent last year and should still have plenty of rationalisation benefits to look forward to. Overseas, meanwhile, downstream margins are largely unchanged but refined products' volume sales are up 6 per cent. More encouraging, the fourth quarter's recovery in chemicals has been sustained.

Even in the present dog-eat-dog conditions of the U.S. oil market, anti-trust considerations must bar Exxon from any significant U.S. oil company acquisition. So it seems to be doing the next best thing and buying itself instead – it has bought up nearly 1.6 per cent of its own shares so far this year, and yesterday put the market on notice that more purchases were still to come.

Unilever accounts

It is ironic that the one major currency in which Unilever has had to report a drop in profits last year should be the U.S. dollar. For the group has not merely come rapidly into vogue with U.S. shareholders – who now own 18 per cent of the NV shares, two-and-a-half times more than at the end of 1982 – but it has been investing heavily in the U.S. and in 1983 started making money in the U.S. detergent market for the first time since 1977.

The bounce in Unilever's U.S. earnings is particularly encouraging, given the declared policy of expansion in the U.S. market. With Lever Brothers, already one of the largest operating units in the group, swinging into the black and net income from Lipton and National Starch moving smartly forward, the overall improvement at the net level was just over 40 per cent. Capital spending in the U.S., mainly angled at the Lever business after years of underspending, jumped from £80m to £100m, while the after tax rate of return – a shade over 8 per cent – appears to be ahead of the Unilever average.

In general, Unilever is at least spreading a more optimistic message, despite having gone through a rough time in Nigeria and Indonesia, and having to struggle on with chronic loss makers, such as the Netherlands meat business. Heavy spending on production capacity through the recession is bound to be levered up in profit terms as the volume recovery continues to flow through this year. And if nothing else, the horribly weak first quarter of 1983 will show up next month's figures in flattering relief.

Hong Kong

British Government ministers are fully a match for the chairman of Jardine Matheson when it comes to knocking some stuffing out of the Hong Kong market. Sir Geoffrey Howe stated only the obvious late last week – and then allowed a long weekend for the obvious to sink in – but he clearly failed in his attempt to preserve calm on the financial markets. The Hang Seng Index promptly shed 4 per cent when trading resumed yesterday.

Among local investors, the selling was almost indiscriminate. Banks were badly hit and even Bermuda shorts afforded Jardine no protection. In London, however, the analysis was more sanguine. Institutions are now arguing that the renewed weakness of the stock market is hardly justified by a domestic economy which has recently seen a pronounced pick-up in residential property values, some evidence of rising capital investment and a containment of inflationary pressures through the labour market.

Certainly the bearishness on the local stock market chimes strangely with the attitude towards the Hong Kong dollar, which has probably been under sufficient upward pressure this year to enable the monetary authorities to rebuild their foreign exchange reserves. At the very least, demand for the currency should be providing the stock market with a cushion of liquidity and may even give the authorities an opportunity to signal their own confidence by way of a modest currency revaluation.

Honda raises earnings by 32%

By Our Financial Staff

HONDA MOTOR, Japan's fifth largest car manufacturer and the world's largest motorcycle producer, increased consolidated net profits by 32 per cent from Y72.24bn to Y95.58bn ($425m) in the year to February 29. Pre-tax profits advanced by 37 per cent from Y147bn to Y202bn and net earnings per share rose from Y84.82 to Y104.16.

Sales last year grew more slowly, by 6.5 per cent to Y2,373bn from Y2,230bn.

Volume sales of cars rose by only 0.6 per cent to 1.12m vehicles, with exports up slightly more than domestic sales. In value terms, however, car sales improved by 8.5 per cent to 56 per cent of group revenue.

There was particularly strong growth in sales of more expensive models on the domestic market, and an increase of 11 per cent in volume terms in sales to the U.S., which reached 460,000 cars during the year.

For the fourth quarter, Honda saw consolidated net income rise by 72 per cent, with overall sales up 13.2 per cent.

The motorcycle sector again offered a sharp contrast. Honda saw sales drop 13 per cent in volume to 3.1m units, resulting in a 7 per cent drop in value to Y499bn, or 21 per cent of the group's total sales.

Reuters adds from Tokyo: Honda has signed an agreement with Kinetic Engineering of India for joint production inIndia of a range of motor scooters. A joint venture company is to be set up in Madhya Pradesh with capital of Rs 100m ($9.25m).

Steady growth for Volvo BM; Daimler-Benz in Japanese sales drive, Page 23

Amoco Cadiz legal battles continue as payout nears limit

BY ALEXANDER NICOLL IN LONDON

DAMAGES ARISING from the wreck of the Amoco Cadiz supertanker six years ago still have to be settled in U.S. courts, but insurance companies have already paid most of the maximum $72m for which they could be liable.

Reinsurers, mostly in London, underwrote almost all the insurance cover.

Standard Oil Company of Indiana, the fourth largest U.S. oil company, faces claims totalling $2bn after a federal district judge in Chicago ruled last week that it was largely responsible for the loss of the tanker, which ran aground in Brittany and polluted 100 miles of French coastline.

Judge Frank J. McGarr's ruling may be challenged and a further trial must be held to determine damages, expected to be far less than the claims total. At Standard Oil's annual meeting in Chicago yesterday, Robert Morrow, chairman said his company believes damages will be about $148m.

Any damages award which exceeded the insurance cover would have to be met by Standard Oil or by Astilleros, the Spanish shipyard which built the tanker. Judge McGarr ruled that the oil company was entitled to damages against Astilleros.

But whatever the outcome of the legal battle, Standard Oil's insurance was limited to $50m for pollution damage, as well as cover for the value of the cargo, believed to be about $23m, less a $1m deduction.

The London Protection and Indemnity Club, an insurance company owned mutually by shipowners, wrote both policies, and has already paid out the bulk of the money. Of the total potential liability, all but $4m was laid off with reinsurers, mainly on the London market.

Pollution damage is the only category of insurance on which a limit is put, according to a London Protection and Indemnity Club spokesman. In the case of the Amoco Cadiz, which was carrying 233,690 tonnes of oil, the insurance cover was the maximum.

After the wreck, the P and I Club paid $18.75m to the French Government, which was then deposited with Brittany banks to await the settlement of claims.

Of that amount, $800,000 was underwritten by the Club itself, $3.4m by other P and I Clubs under pooling arrangements and the rest by reinsurers.

Since then, the P and I Club has paid out $18m, all underwritten by reinsurers, to meet Standard Oil's legal costs, and more of the $50m will presumably be spent in the same way.

Reinsurers also underwrote the cost of the cargo, which was owned by Royal Dutch Shell. Shell was compensated by its insurance company, which was in turn reimbursed by the P and I Club.

The rest of the available insurance money, as well as the funds deposited and accruing interest in France, remain to satisfy claims.

U.S. oil company results, Page 21

Libyan officials visit London to supervise embassy withdrawal

BY MARGARET VAN HATTEM AND RICHARD JOHNS IN LONDON

PROSPECTS FOR an orderly departure by the occupants of the Libyan Embassy in line with Britain's expulsion order improved yesterday as Tripoli sent to London three officials to supervise arrangements for the occupants' departure.

A smooth settlement may also be helped by the quiet deportation yesterday of Mr Abdul Gaadir Khalifa Baghdadi, leader of the four-man revolutionary committee sent by Colonel Muammar Gaddafi to take control of the embassy in St. James's Square and eliminate opponents of his regime in the UK. A personal friend of the Libyan leader, he was arrested early on Monday afternoon in London. The police would reveal no other details.

The three-man team of officials is headed by Mr Abdul Rahman Shaibi, a high-ranking career policeman with the equivalent of deputy ministerial status. Other members of the team were named as Mr Nazir Ashure and Mr Ahmed Said.

Their dispatch to London was prompted by a suggestion made on Sunday by Mr Oliver Miles, UK Ambassador in Tripoli, when he informed the Libyan People's Liaison Bureau (foreign ministry) of the British Government's decision to break off diplomatic relations.

The hope in Whitehall is that Mr Shaibi and his colleagues will be able to make decisions on the spot and speed up the withdrawal. At the same time, the aim is to impress them that the UK is scrupulously observing normal diplomatic practices and thus increase the chances of an unimpeded evacuation by British Embassy staff from Tripoli.

The three-man team will be free to see British Foreign Office and Home Office officials and also be allowed to come and go from the Libyan "People's Bureau" in London.

Yesterday there was no indication as to when the Libyan departure from the embassy would begin.

The building has been besieged since April 17 when an occupant machine-gunned an anti-Gadaffi demonstration, killing Policewoman Yvonne Fletcher and wounding 10 people. The British Government has set a deadline of midnight on April 29.

The deportation of Mr Baghdadi yesterday, and of Mr Salah Ibrahim Mabruk on Monday, means that two of the four "students" involved in the takeover of the embassy have now been expelled. The Home Office said it did not know whether the other two were still inside the embassy.

Eight Libyan students with multiple re-entry visas were detained yesterday at Heathrow airport for questioning. Five arrived from Tripoli on the same flight as Mr Shaibi and three had flown from Belgrade. It is understood that at least one will be rejected because his student credentials are unsatisfactory. But he will be able to appeal.

Bethlehem seeks second quarter profit

By Terry Byland in New York

A RETURN to profitability is expected at Bethlehem Steel in the second quarter of 1984, said Mr Donald Trautlein, the chairman, in his report on the first three months of the year.

Losses increased to $54.6m in the first quarter from $22.5m in the comparable period last year. Operating losses in basic steel divisions were cut from $107m to $36m and operating rates increased from 41 per cent to 71 per cent behind improved demand from consumer-related markets, as well as "some improvement" in capital goods areas.

Mr Trautlein's prediction of a return to profitability hinges on continued improvement in steel prices and on the extension of the U.S. economic recovery into the capital goods sector.

Bethlehem plans to spend $350m to $400m in capital improvements this year and start up is expected in 1986 of the two new continuous steel casters being built at Sparrows Point and Burns Harbor, in the U.S.

Lagos scraps naira in attack on corruption

Continued from Page 1

were selling naira at 4.25 to the pound.

There was even speculation in some quarters yesterday that the new currency could provide the authorities with the opportunity to devalue the naira quietly, as the International Monetary Fund (IMF) is demanding in return for a standby credit of between $7.6bn and $8.1bn. Disagreement on this point is the main difference in talks between Lagos and the Fund – and, by implication, for the rest of Nigeria's debt negotiations.

Making his announcement on Monday, Brig Idiagbon said the Government had established "beyond any doubt that one of the major causes of our economic malaise is… large-scale illegal trafficking of naira notes across our borders." But foreign observers say that the fundamental problems – such as the over-valued naira – run much deeper than that.

Moussa planning comeback

Continued from Page 1

legal manoeuvrings to sell majority control of its Swiss banking offshoot and its Belgian holding company. These companies thus remained under private control when Paribas was nationalised in 1982.

Now that the shadow of the court case has been lifted, M Moussa, 62, with a long career in French finance and administration behind him, is free to pursue long-standing business plans.

Although details have not been finalised, the Luxembourg institution, backed by private shareholders throughout Europe, North America, Asia and Australia, is expected to fulfil M Moussa's ambition of setting up a fully international investment bank.

It will build up diversified corporate shareholdings around the world and could participate in an already-established London investment bank.

In his judgment on the former chairman, delivered to a packed courtroom in the Paris Palais de Justice, M Pierre Culie, the chief magistrate, ruled that M Moussa was innocent since under French law a company chief can be held responsible for fraud committed in his enterprise only if he actively participates in the criminal action.

M Culie upheld the argument presented by M Moussa's lawyer that, as the chairman of an international organisation employing directly and indirectly 120,000 people and with a balance sheet of FFr 240bn, M Moussa could not possibly keep a close check on the 100 people employed in the department concerned.

Two investment managers in the department, M Jean Peynichou and M Daniel Rouchy, were however found guilty of exchange control breaches, along with around 35 Paribas clients.

Controversy on Saudi sacking

Continued from Page 1

their ministries, and in a number of princes of all ranks representing foreign companies, bidding for state contracts and accepting commissions which have sometimes run to more than $100m.

These payments have been perfectly legal, but their sheer size has made them one of the most controversial issues in Saudi Arabia, in the past decade.

King Fahd, for reasons of family loyalty, was unable to support his minister.

The King is unquestionably sorry to see Dr Algosaibi go. He had a high opinion of the minister.

Dr Algosaibi was the most powerful and outspoken member of the Council of Ministers after the King, who is the Council's chairman, and two of the King's full brothers, Prince Sultan and Prince Naif, the Minister of the Interior.

World Weather

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	S	21	70	Dubrovnik	F	15	59	Malaga	C	17	63	Salzburg	F	17	63
Akrotiri	S	18	64	Faro	S	20	68	Malta	S	20	68	Seoul	C	23	73
Algiers	S	21	70	Florence	S	21	70	Manila	S	35	95	Singapore	S	32	90
Amsterdam	S	18	64	Frankfurt	S	19	66	Miami	C	29	84	Stockholm	S	16	61
Athens	S	17	63	Funchal	F	19	66	Milan	S	22	72	Strasbourg	S	20	68
Bahrain	S	35	95	Geneva	S	19	66	Moscow	C	11	52	Sydney	S	23	73
Bangkok	C	35	95	Gibraltar	C	17	63	Munich	S	15	59	Taipei	S	27	81
Barcelona	S	18	64	Guernsey	S	11	52	Nairobi	-	—	—	Tangier	C	19	66
Beirut	S	18	64	Helsinki	S	14	57	Naples	S	18	64	Tehran	-	—	—
Belgrade	F	12	54	H. Kong	C	22	72	New Delhi	S	33	91	Tel Aviv	C	18	64
Berlin	S	15	59	Innsbruck	S	16	61	New York	S	7	45	Tenerife	S	22	72
Biarritz	S	18	64	Inverness	S	18	64	Nice	S	17	63	Tokyo	S	18	64
Blackpool	S	17	63	Istanbul	F	11	52	Oporto	F	19	66	Toronto	R	7	45
Bordeaux	S	24	75	Jersey	S	16	61	Oslo	S	15	59	Tunis	S	22	72
Brussels	S	20	68	Jo'burg	S	22	72	Paris	S	22	72	Valencia	F	19	66
Budapest	-	—	—	Las Palmas	F	22	72	Prague	F	12	54	Venice	S	18	64
B. Aires	C	17	63	Luxor	S	24	75	Reykjavik	C	10	50	Vienna	R	11	52
Cairo	C	24	75	Lisbon	F	19	66	Rio de J'o	S	35	95	Warsaw	S	13	55
Cape Town	-	—	—	Locarno	S	22	72	Rome	S	18	64	Zurich	S	18	64
Caracas	R	30	86	London	S	19	66								
Casablanca	C	21	70	Los Angeles	S	31	88								
Copenhagen	S	16	61	Luxembourg	S	18	64								
Corfu	F	17	63	Madrid	S	21	70								
Dublin	S	15	59	Majorca	S	24	75								

Readings at mid-day yesterday:

C–Cloudy D–Drizzle F–Fair Fg–Fog H–Hail R–Rain S–Sun Sl–Sleet Sn–Snow T–Thunder

Eastern back in profit

BY OUR NEW YORK STAFF

EASTERN AIRLINES, the fourth biggest U.S. domestic carrier, which lost $183.1m in 1983, has made its first profit in nearly two years. Yesterday it reported a $16.7m operating profit for the first quarter of 1984, compared with a $24.5m loss a year ago.

At the net level the beleaguered airline was still in the red, reporting a first-quarter net loss of $28.1m, down from $60.7m a year ago. However, the airline says that in March it made a net surplus of $6.4m, the first monthly profit since August 1982, if exceptional items are stripped out.

Mr Frank Borman, the former astronaut who now heads Eastern, said that while the airline's workforce could be justifiably proud of the latest results it should not lose sight of the "real challenge of competing with airlines whose only advantage is wages, salaries and benefits that are substantially lower than ours."

The company says its latest net loss was due to lower than hoped for yields and load factors, especially in the north east to Florida market and the Houston market.

TWA cuts loss, Page 21

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FINANCIAL TIMES

Wednesday April 25 1984

U.S. OIL GROUPS SHOW GENERAL UPWARD TREND

Exxon up 39% in first quarter

BY WILLIAM HALL IN NEW YORK

EXXON, the world's largest oil company, increased its net income by 39.2 per cent to $1.46bn in the first quarter of this year, underlining the strong recovery the major oil companies are now experiencing from the depressed first quarter of last year.

Mr Charles Garvin, Exxon's chairman, said the strong earnings growth reflected improved economic conditions and solid operating performance as well as continued emphasis on cost control. Colder weather in this year's first quarter increased seasonal demand and world crude prices remained relatively stable.

Group revenues rose 5.1 per cent to $24.9bn. Earnings per share totalled $1.75 in the latest period against $1.22 a year ago.

Exxon's earnings increase was due in large part to a 24.5 per cent rise in foreign exploration and production profits to $730m. U.S. earnings from the group's same segment rose by 7.6 per cent to $551m. In common with other oil companies, Exxon's chemical businesses reported a sharp profit recovery.

The group says that increased production of crude oil and natural gas was a "major factor" in its earnings increase. The group's net production of crude oil and natural gas liquids rose 8.6 per cent to an average of 1.647m barrels a day.

Standard Oil Company (Indiana) and Atlantic Richfield, two of the top 10 U.S. oil companies, have reported sharp increases in first-quarter earnings due to recovery in their refining operations and higher oil production.

The Chicago-based Standard Oil Company (Indiana) increased its first-quarter net income by 49 per cent to $594m and Atlantic Richfield (Arco) increased its net income by 20 per cent to $395.1m.

Mr Richard M. Morrow, Standard's chief executive, said the improvement was "largely attributable to significantly higher profitability levels for refining, marketing, and transport activities and chemical operations."

The group's worldwide refining and marketing operations posted earnings of $22m in the latest quarter, compared with a loss of $106m a year ago. Worldwide refinery capacity use rose from 74 per cent to 80 per cent.

Arco said its increase in earnings was due "principally to increased foreign crude oil production, higher domestic natural gas sales, stronger margins for petroleum products and improved chemical markets." Arco's refining operation increased its earnings 152 per cent to $68m while the chemical operations moved from a loss of $3m to earnings of $41m.

Arco's worldwide crude oil and natural gas liquids production rose 3 per cent to an average 710,000 barrels a day in the first quarter. Standard Oil Company (Indiana), however, boosted its worldwide production by 9 per cent to an average 841,000 b/d in the first quarter.

Standard's first quarter earnings do not include any provision for possible damages stemming from the sinking in 1978 of the Amoco Cadiz, one of the group's supertankers. A U.S. judge last week found Standard liable for damages, but the company said an appeal may be made against the ruling and a separate trial would have to be held to determine the amount to be paid.

Standard Oil earned $2.03 per share in the latest quarter against $1.38 share a year ago. Arco earned $1.53 per share compared with $1.29 per share a year ago.

At Ashland Oil, the largest independent U.S. refiner, second-quarter net profits were $5m, compared with a loss of $14.5m, on revenues up from $1.8bn to $2bn. After payment of preferred dividends there was a per share loss of 11 cents in the latest quarter, against 89 cents.

The latest quarter's profits are down sharply from the $27.2m earned in the first quarter, and take six-months profits to $32.2m or 55 cents a share against $14.6m, or a loss of 14 cents after preferred dividend payments. Revenues rose from $3.9bn to $4.1bn.

Hughes Tool, one of the largest oil industry service companies, slipped back into the red in the first quarter of 1984 with a net loss of $14.6m compared with net income of $1.4m a year ago.

The company said that although U.S. drilling activity in the first quarter showed a modest increase compared with last year, most of this increase was offset by declines in overseas drilling activity.

Earnings up sharply at Union Carbide

By Terry Dodsworth in New York

UNION CARBIDE, the U.S. chemicals company, rebounded from the recession in the first quarter of this year with a 123 per cent increase in net profits.

The Connecticut-based group, which wrote off $139m for a broad ranging reorganisation in the final quarter of last year, said that net income rose to $107m, or $1.51 a share, against $48m, or 69 cents a share.

Sales were up by 9 per cent to $2.39bn against $2.19bn in the same period last year. Mr Warren Anderson, chairman, said that the results had put the company "firmly back on the earnings recovery track." The improvement in first quarter margins and profit level reflected the leverage of higher sales volume impacting on a leaner company.

The sales increase in the quarter was led by exports, with a rise of 38 per cent, while domestic turnover increased by 13 per cent and international by 1 per cent.

The main impetus behind the earnings growth came from the rationalised petrochemicals sector, but the group's technology, metals and industrial gases divisions all showed big increases in operating profits for the quarter.

First quarter earnings were also up sharply at Rohm & Hass, the Philadelphia-based chemicals company. Net profits jumped from $33.7m or $1.31 a share to $56.3m or $2.18, with sales up from $462m to $548.1m.

Quebec paves way for insurance groups to extend operations

BY BERNARD SIMON IN TORONTO

THE SEPARATIST Government in Quebec is to take another step towards liberalising the province's financial system in the face of serious misgivings among Canada's other provinces and the country's largest banks.

A Bill introduced in Quebec's legislature has proposed changes to the province's insurance law which will allow the 33 insurance companies chartered in Quebec to extend their operations into other areas, including mortgage loans, pension fund management and various savings plans.

These companies' assets total around C$3.3bn (U.S.$2.5bn). They will also be allowed to form subsidiaries to operate in areas outside insurance and will be given wider freedom in their investment policies.

Mr Jacques Parizeau, Quebec's Finance Minister, said the Bill is part of a process to enable Quebec residents "to do business with real financial supermarkets and to manage their savings in a rational and integrated way."

The insurance Bill follows a spate of moves which have taken Quebec far ahead of other provinces in fragmenting the traditional "four pillars" of the Canadian financial system banks, trust and loan companies, insurance companies and investment dealers.

A Montreal-based company, Power Corporation, announced earlier this month that it is to group various financial service interests, mainly in the trust and insurance businesses, under one holding company.

Quebec tax incentives have also encouraged a spate of new listings on the Montreal stock exchange in recent months. The perks include tax-free grants to certain companies selling shares to the public.

The moves to liberalise the province's financial system have been widely interpreted as an effort by the Government to persuade more financial institutions and other companies to base themselves in Quebec, as well as a tactic to bolster Quebec's own non-banking institutions.

Some Toronto-based bankers are concerned that Quebec's moves will prompt other provinces to act against Quebec institutions, sparking off a protracted squabble in the financial sector. Mr Robert Mackintosh, president of the Canadian Bankers' Association, said he is concerned that the province is "breaking down" a free internal market.

Hawley's defence tactics challenged

By Our New York Staff

THE LIMITED, the fast growing Columbus-based retail store group which is trying to take over its much bigger rival, Carter Hawley Hale, will today seek to have the latter's defence strategy declared "unlawful and invalid" in a Los Angeles court hearing.

The court action, which will be heard in the federal district court for the central district of California, takes place against a background of growing official concern about some of the moves Carter Hawley Hale has taken to ensure its independence.

The New York Stock Exchange and the Securities and Exchange Commission (SEC) have said they are concerned that Carter Hawley's offer for its own shares might be constituted as a tender offer.

The SEC has also questioned whether Carter Hawley disclosed promptly the alleged reservations by the New York Stock Exchange about the group's defence tactics, which involve heavy buying in of its own shares, the sale of $300m of preferred stock to General Cinema, giving it a 23 per cent voting stake, and the proposed sale of its Waldenbooks chain book store operation.

Carter Hawley Hale has already bought 37 per cent of its own shares, and Wall Street takeover tacticians believe that the only way that The Limited might succeed with its $1.1bn takeover bid is by obtaining a court ruling forcing Carter Hawley Hale to dismantle some of its defences.

In a letter to shareholders, Carter Hawley's chairman, Philip Hawley, condemns The Limited's "lack of sensitivity shown in its unwelcome pursuit" of his company.

National Intergroup up

BY TERRY DODSWORTH IN NEW YORK

NATIONAL INTERGROUP, the U.S. steel and financial services group, reported net profits of $7.6m or 18 cents a share in the first quarter, against a loss of $35.4m.

Sales in the quarter amounted to $774m against $777.7m, but the year ago figure was inflated by the presence of the Weirton Steel division, which has since been divested. Without this, sales would have amounted to $558m in 1983.

Barclays to exploit US loophole

By William Hall in New York

THE BARCLAYS Bank Group has applied for permission to open "consumer banks" in 16 U.S. states in a move which could significantly strengthen its position before the barriers to banking across state lines are removed.

Barclays is the first major foreign bank to attempt to exploit a loophole in U.S. banking regulations which was highlighted a few weeks ago by a small New York Bank, U.S. Trust, when it applied for permission to open a consumer lending and deposit-taking operation in Florida and was given approval. As its operations will not make commercial loans or take demand deposits it is not categorised as a bank and hence does not conflict with U.S. banking laws, which generally prohibit banks from doing business in more than one state.

Barclays Bank and Barclays Bank International have applied for permission to open national banks which make consumer loans and accept deposits in the following states: Connecticut, Florida, Georgia, Indiana, Louisiana, Maryland, North Carolina, New Mexico, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Washington.

Crocker chief quits after staff shake-up

BY DAVID LASCELLES IN LONDON

THE PRESIDENT of Crocker National Bank, Midland Bank's loss-plagued California subsidiary, has resigned – apparently because the big staff shake-up there resulted in his effective demotion.

Mr J. Hallam Dawson's departure was, according to a formal announcement from Crocker, "a result of the organisational changes at the bank which commenced earlier this year with the appointment of Mr John G. Harris as senior vice-chairman and Mr Frank Cahouet as chairman and chief executive officer."

Mr Dawson, 47, became president in 1981 just as Midland was negotiating its 57 per cent stake in Crocker. He was then number three in the bank, under John Mr Place, the chairman, and Mr William Morris, the vice-chairman.

Since then, however, Midland has appointed both Mr Cahouet and Mr Harris above him, as a part of its effort to gain firmer control of the bank and steer it back to financial health. As a result, Mr Dawson became number five.

Mr Cahouet, who was appointed only a month ago, will add Mr Dawson's title to those he already holds.

Neither Midland Bank nor Crocker would comment on the brief announcement.

Mr Dawson, who had been with Crocker for nine years, declined to comment because "there are a lot of people here working hard in very difficult circumstances, and they deserve to have some success."

He said he had no immediate plans, but was attracted by the idea of joining one of the many "entrepreneurially driven" companies sprouting up in the high-technology industries around San Francisco, where Crocker is headquartered.

Digital Equipment advances

BY OUR NEW YORK STAFF

DIGITAL Equipment, the second largest U.S. computer manufacturer, reported a 28 per cent jump in third quarter net profits from $79.6m or $1.40 a share, to $101.9m, or $1.77 a share.

Sales also rose strongly in the quarter, going up by 34 per cent from $733m to $979m. But because of a heavy 72 per cent drop in the group's first quarter earnings, net income was only just ahead at the end of the nine months – to $198.2m from $197.6m.

Merrill Lynch declines

By Terry Byland in New York

THE SLOWDOWN IN U.S. securities markets has again cut heavily into profits at Merrill Lynch, the largest group in the industry, for the first quarter of the year. Merrill earned only $18.6m, and that included $16.1m in income tax benefits. In the comparable period when Wall Street was enjoying boom trading conditions, Merrill earned $127m or $1.54 a share, the second highest total for any trading quarter in the group's history.

Mr Robert Birk, chairman, and Mr William Schreyer, president, noted that in previous comments they had said that "the slowing markets and deteriorating margins that marred the second half of 1983 have continued so far this year."

Revenues other than interest fell nearly 18 per cent from the comparable totals, but were only 5 per cent below those for the final quarter of last year. Expenses other than interest have been cut by 4 per cent from last year's final quarter.

Commission revenues of $357m were 13 per cent down on last year's first quarter, but Merrill increased its market share over the period. Real estate, insurance and interest revenues moved higher but revenues from investment banking and from transactions as a principal fell sharply.

Dart & Kraft lifts profit by 9.4%

By Our New York Staff

DART & KRAFT, the processed foods and kitchenware marketing group, recorded a 9.4 per cent increase in net profits in the first quarter to $107.8m, or $1.97 a share, from $98.5m or $1.79 a share. Sales grew by 4 per cent to $2.41bn from $2.32bn.

The results reflect a continuing decline in profits on Tupperware kitchen products, which have been hit by increased promotional expenditure.

They were helped by a decline in foreign currency translation losses to 5 cents a share, against 14 cents in 1983.

The group said that the Kraft cheese business, Hobart kitchen equipment and Duracell batteries businesses continued to perform strongly in the quarter.

Operating profits at Kraft increased by 4 per cent and sales were up by 3 per cent, but these figures are set against an extremely strong quarter a year ago.

Earlier this month Dart & Kraft agreed to sell its plastic specialities businesses to a leveraged buyout investor group headed by Mr Fred W Broling, president of the businesses, and other senior management.

Terms of the sale, which will be a cash transaction, were not disclosed. The gain on the sale is not expected to have a material effect on Dart & Kraft's 1984 earnings.

Eaton results up sevenfold in quarter

By Our New York Staff

A STRONG recovery in profits at both the trucks and auto parts and the electronic and electrical parts divisions, has pushed first quarter earnings ahead sevenfold at Eaton, the Cleveland-based manufacturing group.

Net earnings for the quarter have jumped from $8.3m or 28 cents a share to $59.8m or $1.85 a share. Sales gained one third to $815.1m.

Mr E. Dewindt, chairman and chief executive, expects results for the current quarter to be "excellent."

The truck and car divisions, which make components used throughout the auto industry, and account for about half of total group sales, lifted profits from $21m to $85m in the first quarter.

Electronic and electrical operations, which include power transmission systems and electronics and electrical equipment, turned in profits of $19m against $4m in the comparable period.

For the whole of fiscal 1983, Eaton earned $93.3m or $3.06 a share on sales of $26.7m. Profits peaked at $154.1m in 1979, and fell sharply in 1982 as U.S. industry struggled with recession.

TWA cuts loss to $87m

By Our New York Staff

THE FIRST quarterly trading report from Trans World Airlines, which was spun off from Trans World Corporation in February this year, shows a reduced loss.

The lower net loss, from $92.7m to $87.3m, reflects a $61.4m narrowing of the operating loss at the domestic division, said the company.

Profits recover at Cincinnati Milacron

By Our New York Staff

THE RAPID restoration of profitability continued in the first quarter at Cincinnati Milacron, the largest machine tool manufacturer in the U.S., but sales showed a minor downturn from the final quarter of last year.

Mr Clifford Meyer, president, told the annual meeting that many of the group's machine tool plants continue to operate well below capacity. The board looks forward to increased demand and further improvement in earnings in 1984.

Net earnings of $1.8m or 8 cents a share for the first three months of the year compared with a loss of $4.9m in the opening quarter of 1983 when the machine tool industry was still flat, as the U.S. struggled to recover from the recession. Sales, at $151.7m, are 22 per cent up on the 1983 quarter.

For the full fiscal 1983 year, Cincinnati turned in a deficit of $10.3m but returned to profitability in the final quarter with net earnings of 8 cents a share on sales of $153.5m.

INTL. COMPANIES & FINANCE

Skanska Cement warns of 1984 earnings setback

BY DAVID BROWN IN STOCKHOLM

SKANSKA CEMENT, the big Swedish construction group, reports broadly maintained profits for 1983 and plans to step up the dividend.

For the current 12 months, however, the company warns that profits could be heading a sizable setback after what it describes as two years of extremely good trading.

Pre-tax profits before extraordinary items were SKr 1.53bn ($195m) for 1983, against SKr 1.55bn a year earlier. The group expects that its results for 1984 "will be considerably lower" due to poor market conditions.

Roughly 35 to 40 per cent of the group's income is generated by its substantial financial and property holdings.

Sales improved by 4 per cent to SKr 12.2bn. The proportion of foreign contracts in the group total declined from 24 to 22 per cent.

An extraordinary credit of SKr 100m stemming from the sale of an investment subsidiary brought profits before allocations and taxes to SKr 1.63bn, up SKr 80m on the previous year.

Skanska proposes a dividend of SKr 10 a share, up from SKr 8.67 in 1982. It also plans to split its shares from SKr 50 par value to SKr 10.

Skanska and Volvo, the motor and industrial group, recently forged equity links through an elaborate share transaction. They are understood to be seeking co-operation in international industrial projects.

The link has been widely interpreted in Sweden as an attempt by Volvo to fortify itself against the rising influence of the so-called Wallenburg group, which has emerged recently as a major Volvo shareholder.

Nestle lines up U.S. takeover

BY JOHN WICKS IN ZURICH

A FORMAL offer for Coopervision, the U.S. contact lens maker, is expected to be unveiled today by Nestle, the Swiss foods group.

Nestle confirmed yesterday that it has been negotiating with the West Coast ophthalmological group with a view to a binding offer, said by Coopervision to be worth around $500m.

If a bid is made, it will be the largest takeover ever undertaken by a Swiss company.

Nestle, which has big cash reserves, has had its name linked with a variety of takeover candidates in recent months.

Nestle is due to release its 1983 report and accounts at a Press conference today. It is expected to make clear its position on Coopervision at the same time.

Earlier this month, Nestle announced a 15 per cent increase in net profits and paved the way for a rights issue, the first equity issued by the company for almost ten years.

The improving cash-flow has allowed Nestle to maintain a healthy cash position. At the end of last year, cash, securities and deposits totalled SwFr 5.24bn ($2.4bn).

Coopervision, which went public last year having been set up by Cooper Laboratories in 1980, had sales of $198.6m for 1982-83. In the first quarter of this year turnover was up to $57.1m.

Spanish power investors face cuts in dividends

By David White in Madrid

SHAREHOLDERS of more than a dozen Spanish electrical utilities face lower dividends under a plan drawn up by the Socialist Government for reinforcing the companies' precarious finances.

The plan, the main lines of which are the fruit of government-industry negotiations, comes in response to a deteriorating debt problem following heavy investment programmes which were largely financed from abroad.

Private-sector companies account for almost 80 per cent of electricity sales in Spain.

The plan amounts to dedicating some Pta 75bn ($500m) out of the sector's revenues this year to strengthening the utilities' financial base and compensating for their investments in five nuclear reactor projects which have been cancelled by the Government.

This financial restructuring opens the way for other changes in the sector, through transfers of assets or mergers between private utilities.

The scheme outlined by Sr Carlos Solchaga, the Industry Minister, is linked to electricity rate increases averaging 8.75 per cent, which were approved by the Government last week.

Companies are to set aside 2.8 per cent of their revenues from energy sales as a special allocation for improving their balance sheets. The Government is proposing a voluntary programme under which the companies can manage these funds directly, subject to approval of individual corporate plans.

The companies will also have to fulfil one of three conditions, all aimed at relieving financial pressure. Either investments must be at least as big as net new borrowing, or new injections of equity capital must be at least as *big as dividend payouts*, or net dividends must be kept within an 8 per cent ceiling.

This compares with a current average of about 10 per cent paid out annually to the utilities' 1m-plus shareholders. The Government has already been pressing for more moderate dividend payments, and welcomed last year's decision by Iberduero, the largest utility, to cut its net payout from 10 to 7.5 per cent.

Companies which do not make a pact with the Government along these lines will have to place the same proportion of their funds in a special account with the industry body UNESA, the money will then be used at the Ministry's discretion.

In addition, the slice of electricity revenues destined to cover the cost of cuts in Spain's nuclear power programme is being increased to 3.9 per cent, from the 2.89 per cent level set last autumn.

The Government confirmed last month it was calling off five reactor projects, allowing the total number of reactors to be increased from the six already in operation to 10 in 1992. The reduction, geared to a downscaling of forecasts for energy needs, involves writing off investments of almost Pta 500bn, principally in the private sector.

A further aspect of the Government's plan is to reform the forfeit system which the utilities currently operate among themselves, compensating for the differences in production costs according to their sources of energy.

Volvo BM registers steady growth

Financial Times Reporter

VOLVO BM, the construction equipment division of the Swedish automotive group, has reported a 29 per cent rise in profits before allocations and tax in 1983 to SKr 109m ($13.9m).

Turnover, including that of Kockum Landsverk, the dump truck manufacturer acquired last year, was up 28 per cent to SKr 2.5bn. Excluding Kockum, turnover was 11 per cent higher.

Mr Eric Johanson, president, said that income was not satisfactory, but was gratifying considering the economic conditions that prevailed in 1983.

Regarding the recently announced talks aimed at merging Volvo BM with the construction equipment division of Clark Equipment of the U.S., Mr Johanson said the aim was to create "an entity strongly established on all major markets.

"Volvo BM and Clark Michigan have both shown considerable strength during the latest recession. Taken together, the two companies could reach positive economies of scale in R&D, manufacturing, marketing and other areas."

He claimed they would be the leading world supplier of off-highway dump trucks and the third largest of wheel loaders.

Solvay doubles profits as chemical demand picks up

BY PAUL CHEESERIGHT IN BRUSSELS

SOLVAY, the international chemicals concern and Belgium's second largest company, last year doubled net profits and hoisted its net dividend back to levels last approached in 1979.

Net profits were BFr 5.2bn ($96m) compared with BFr 2.59bn in 1982. The net dividend is going up to BFr 235 a share from BFr 200.

Solvay's financial position began to improve in 1982 as the group sought to reduce costs by, for example energy saving and the closure of less profitable plants. This process continued in 1983 but was helped crucially by an upturn in world demand.

Group sales were BFr 198.7bn, or 12 per cent higher than the previous year's BFr 177.79bn. Of the total, Germany and France accounted for nearly half.

The generally more favourable economic conditions which are reflected in the group figures also show up in the profits of the parent company, whose activities cover Belgium, France, Italy and Spain. Net profits rose to BFr 2.9bn last year from BFr 2.2bn in 1982.

Societe Generale improves its balance sheet ratios

BY OUR BRUSSELS STAFF

THE FINANCIAL structure of Societe Generale, Belgium's *largest financial and industrial* holding company, has been transformed steadily over the last three years, culminating in a BFr 5.5bn ($101.5m) shares issues last November.

In its annual report, just published, Societe Generale said that in 1982 and 1983, the ratio of own funds to fixed assets and investment holdings rose from 69 to 82 per cent. During that period the group's own investment holdings rose by 9 per cent.

Both Societe Generale's own capital raising and the capital raising of its affiliates have taken place against a background of special tax concessions for new stock exchange *investment. Capital raising by* Belgian listed companies over those two years reached a total of more than BFr 83bn.

In the case of Societe Generale itself, shareholders equity increased over 3.5 times between 1980 and 1983, from BFr 16.4bn to BFr 42.59bn.

At the end of last year shareholders' funds were BFr 34.78bn against BFr 26.87bn at the end of 1982, while net liabilities fell to BFr 7.8bn from BFr 12.2bn.

For 1983, Societe Generale *earned net profits of BFr 1.2bn* and held its dividend at BFr 90 net for the third successive year.

Daimler-Benz in Japanese sales drive

By Our Financial Staff

DAIMLER-BENZ, the West German motor group, plans to increase car sales in Japan to more than 10,000 vehicles annually in the next three years with the introduction of new models, according to Herr Hans-Juergen Hinrichs, marketing manager.

In a company statement, Herr Hinrichs told a German Trade Fair in Tokyo that Daimler plans to launch its Mercedes-Benz 190 compact series on the Japanese market in the autumn.

More than 6,600 new Mercedes-Benz cars were registered in Japan in 1983, making Daimler the most successful German importer in Japan of top range models.

Beijer to buy stake in Calmar

BY OUR STOCKHOLM STAFF

AGREEMENT HAS been reached for Beijer, the large Swedish investment company, to buy a 22 per cent stake in Calmar, a U.S. manufacturer of dispensing equipment, for some $23m.

The group will finance the acquisition with the issue of "up to $30m" in sub-ordinated debt instruments in London early summer.

Calmar and the Beijer subsidiary, Kebo, already co-operate *in several business areas*, and the deal will open the way for possible worldwide marketing of Kebo hygenic products.

German lift for Philip Morris

By Our Financial Staff

PHILIP MORRIS, the U.S. diversified tobacco group, increased its share of the West German cigarette market in the first quarter of this year to 17 per cent from 14 per cent a year ago.

Sales rose 26.7 per cent to 4.8bn cigarettes from 3.8bn, making the company market leader in Germany. Total German sales rose 4 per cent to 28bn cigarettes in the quarter.

North American Quarterly Results

ALLEGHENY INTL. Consumer products, hardware, metals

First quarter	1984 $	1983 $
Revenue	575.6m	576.7m
Net profits	5.5m	15.5m†
Net per share	—	2.38†

†Loss

AMERICAN BRANDS Tobacco products

First quarter	1984 $	1983 $
Revenue	1.84bn	1.79bn
Net profits	105.7m	97m
Net per share	1.86	1.67

BC FOREST PRODUCTS Pulp & paper

First quarter	1984 C$	1983 C$
Revenue	176.2m	194.5m
Net loss	*10.7m*	*16.1m*
Net per share	0.22m	0.34

CHESEBROUGH-POND'S Toiletries, foods

First quarter	1984 $	1983 $
Revenue	421.1m	401.5m
Net profits	18.6m	28.8m
Net per share	0.52	0.81

CHUBB Insurance

First quarter	1984 $	1983 $
Revenue	—	—
Op. net profits	13m	24.5m
Op. net per share	1.05	2.06

CONRAIL East coast railway

First quarter	1984 $	1983 $
Revenue	857.1m	729.7m
Op. net profits	85.9m	12.6m
Op. net per share	—	—

CONTINENTAL TELECOM Independent telephone company

First quarter	1984 $	1983 $
Revenue	534m	489m
Net profits	45m	39m
Net per share	0.63	0.55

DOMINION RESOURCES Energy resources

First quarter	1984 C$	1983 C$
Revenue	698.3m	642.8m
Net profits	77.9m	59.2m
Net per share	0.94	0.74

DUN & BRADSTREET Business information

First quarter	1984 $	1983 $
Revenue	365.1m	314.3m
Op. net profits	73.3m	62.5m
Op. net per share	0.74	0.57

GREAT LAKES FOREST PRDS. Pulp and paper

First quarter	1984 C$	1983 C$
Revenue	137m	106m
Net profits	208,000	7.7m†
Net per share	0.04	

†Loss

HUGHES TOOL Drilling bits

First quarter	1984 $	1983 $
Revenue	288.3m	310.8m
Net profits	14.6m†	1.38m
Net per share	—	0.02

†Loss

KIMBERLY-CLARK Tissues, newsprint

First quarter	1984 $	1983 $
Revenue	902.4m	811m
Net profits	60.6m	52.5m
Net per share	2.66	2.33

McDONALD'S Fast food restaurants

First quarter	1984 $	1983 $
Revenue	759.4m	683.1m
Net profits	75m	65.9m
Net per share	1.27	1.19

NORTHERN TELECOM Telecoms equipment

First quarter	1984 C$	1983 C$
Revenue	342m	259m
Net profits	57.1m	47.4m
Net per share	0.50	0.44

PENN CENTRAL Energy equipment, electronics

First quarter	1984 $	1983 $
Revenue	531.3m	622m
Net profits	38.6m	26.3m
Net per share	0.76	0.54

PEOPLE EXPRESS AIRLINES Passenger airlines

First quarter	1984 $	1983 $
Revenue	108.1m	51.8m
Net profits	18,000	2.1m
Net per share	0.00	0.13

SAFEWAY STORES Supermarkets

First quarter	1984 $	1983 $
Revenue	4.4bn	4.2bn
Net profits	22m	23.9m
Net per share	0.37	0.46

INTL. COMPANIES & FINANCE

Sharp rise in group earnings at Ito-Yokado

By Yoko Shibata in Tokyo

ITO-YOKADO, a major supermarket chainstore operator, has consolidated its position as Japan's most profitable retailer in the year to February.

Together with its 19 consolidated subsidiaries the company lifted net earnings by 43.5 per cent to Y21.24bn ($94.4m) on group sales of Y996bn, up by 7.8 per cent from the previous year. Net profits per share improved to Y76.83 from Y55.43 and the dividend is held at Y19 per share.

The strong group showing is attributed to a significant improvement in parent company results. Pre-tax profits advanced by 43 per cent to Y31.85bn, net profits by 20 per cent to Y14.82bn, and sales by 6.9 per cent to Y860.9bn.

Good results from the company's listed subsidiaries, such as Seven Eleven, Denny's Japan, and York-Benimaru also contributed to the improved group earnings. Both Seven Eleven and Denny's Japan lifted pretax profits by more than 30 per cent.

For the current year Ito-Yokado's consolidated sales are likely to top Y1,000bn for the first time and consolidated net profits are expected to reach Y70bn.

Record issue for Malayan Banking

By Wong Sulong in Kuala Lumpur

MALAYAN BANKING, Malaysia's second largest bank, is seeking to raise 630m ringgit (US$270m) from its shareholders by a record issue on the Kuala Lumpur Stock Exchange.

The directors say the proceeds would be used to finance the bank's 58-storey headquarters being built in Kuala Lumpur and a sports and staff training centre, and to align its capital to the rapid growth of its deposits and assets as required by law. Malayan Banking shares fell 70 cents to 11 ringgit after the announcement.

The bank is proposing to issue 45m new shares through a one-for-four rights issue, priced at 6 ringgit per share. It will also issue 360m 8 per cent, irredeemable, convertible and unsecured notes, to be sold at their par value of one ringgit each on the basis of two notes for each share held. There will also be a one-for-four scrip issue.

Following the issues, the bank's paid-up capital would increase from 180m ringgit to 270m ringgit.

After-tax profits of the bank for the six months ended December rose 34 per cent to 50.6m ringgit. The biggest shareholder in the bank is the Malay investment agency, Permodalan Nasional.

ADB completes 40% of 1984 borrowing plan

BY PETER MONTAGNON IN AMSTERDAM

THE Asian Development Bank (ADB) has already completed about 40 per cent of 1984 borrowing programme, having borrowed intensively in the early part of the year out of fears that interest rates will rise, Mr Edgar Roberts, its treasurer, said yesterday.

"Our view at the end of last year was that we had bottomed out in terms of the interest rate cycle," he said in an interview. "With U.S. rates likely to go up this year either interest rates in other markets will also go up, or exchange rates will weaken, which reduces the amount of capital available in those markets for the Asian Development Bank."

Total capital market borrowing in 1984 will again be about $1bn compared with $979m last year. Further slight increases are expected until 1987 when the ADB's borrowing needs will jump as maturing debts have to be refinanced, he said.

Yesterday the bank signed a Fl 200m, 8¾ per cent bond issue at its annual meeting here, but Mr Roberts said the bulk of this year's borrowing is expected to be in yen. The bank has already borrowed Y40bn this year and could raise as much as Y90bn altogether.

Its borrowing policy involves seeking out long maturities at low fixed rates of interest. Unlike the World Bank, which occasionally raises relatively short-dated bonds, ADB prefers at least a 10-year maturity.

It is unlikely to launch a further issue in sterling this year, having already floated a £100m 10½ per cent bulldog issue but it does expect to raise dollars to retire maturing debt.

At the end of 1983 the bank's total outstanding borrowings were $3.4bn of which 36 per cent were in yen, 22 per cent in D-Marks, and 19 per cent in Swiss francs. The total cost of outstanding borrowings rose last year to 8.56 per cent from 8.38 per cent in 1982.

Growth in Bahrain OBU market

BY MARY FRINGS IN BAHRAIN

BAHRAIN'S offshore banking market grew by 3.4 per cent to U.S.$59.5bn in February, the Bahrain Monetary Agency (BMA) reports. Upwards of $400m of the $1.98bn increase can be attributed to the inclusion of the Arab Investment Company (TAIC), which has moved its treasury and commercial banking operation from Riyadh to its Bahrain offshore banking unit (OBU).

The fluctuations of the market, from $62.7bn at the end of December to $57.97bn in January and almost back to $60bn a month later, are thought to reflect the operations of a few major institutions among the 76 OBU's reporting to the BMA.

An analysis of the February figures shows that loans to non-banks accounted for 30.6 per cent of total assets while deposits from the same sector represented 23.3 per cent of total liabilities.

Arab countries, deposits at $39.4bn exceeded their borrowings by $11.6bn. The major receipients of this surplus were Latin America, Asian countries and Eastern Europe. These are included in the "other countries" category which accounted for net borrowings of $7.7bn. Western European countries were net borrowers by $2.5bn and other offshore centres (mainly Hong Kong and Singapore) by $1.4bn.

The U.S. dollar share of the market was 73 per cent of assets and 66.1 per cent of liabilities, down from 74.9 per cent and 68.3 per cent in December.

● The Diplomat, Bahrain's $40m Trusthouse Forte hotel which opened in February 1982, improved its performance last year but is having an uphill struggle to obtain an economic share of the market.

Room occupancy averaged only 48 per cent against a targeted 55 per cent, but revenues were 17 per cent up on the previous year and losses were reduced from BD 1.97m (US$5.2m) to BD1.32m. The reduction was mainly due to a decrease in debt service payments, from $3.2m to $1.3m.

The Diplomat is owned by the publicly-quoted National Hotels Company, a Bahraini shareholding company in which Kuwait Foreign Trading, Contracting and Investment Company (KFTCIC) holds a controlling 58.5 per cent interest, following $18.5m injection of capital in 1982. THF manages the hotel.

Nippon Steel orders new vessel and guarantees another four

TOKYO – Nippon Steel Corporation said yesterday that its new 50 per cent subsidiary, Nippon Steel Shipping, has ordered a 170,000 gross tonnes bulk carrier to be launched in March 1985.

Nippon Steel has also given five-to-ten-year cargo guarantees to enable another four vessels of about the same tonnage to be ordered by five other shipping companies for launching by early 1985. A cargo guarantee is required by Japan's Transport Ministry before permission to build new vessels is granted.

Nippon Steel Shipping's other owners include: Nippon Steamship with 30 per cent, Shinwa Shipping with 10 per cent and Nittetsu Trading with 10 per cent.

The Japanese steel industry's coking coal and iron ore imports from Australia, Brazil and India often result in carriers being built with cargo guarantees from leading steel producers, which in turn profit from large steel-plate orders from shipbuilders. But industry sources noted that the new Nippon Steel orders have come when the world shipping market faces a tonnage surplus.

In Japan, laid-up tonnage is now about 41.59m tonnes, with new orders for the 1983-84 financial year ended March 31 at 12.43m tonnes, according to the Japan Shipbuilding Industry Foundation.

Nippon Steel said the new orders would help to stimulate demand for its depressed large steel-plate division and at the same time assist Japanese yards suffering from recession.

Despite international criticism of recent Japanese shipbuilding programmes, the four new buildings supported by Nippon Steel cargo guarantees have attracted semi-official loans. Industry sources said half the costs of building each vessel will be financed by long-term low-interest loans from the semi-official Japan Development Bank, justified on the ground that each will carry cargoes of national necessity.

The bulk carrier ordered by Nippon Steel Shipping had not received semi-official loans and will be financed by the company equity holders.

● Hitachi and Showa Denko K.K. have agreed to team up with Allied Corporation, a major U.S. chemical company, to develop a new type of battery.

A Showa Denko spokesman said the agreement with Allied aims to develop a "polymer battery" by infusing ions into conductive polymer via electrochemical charging reaction.

Compared with the conventional battery that uses lead and nickel cadmium, a polymer battery would be lighter, more powerful and could be made in many shapes, the spokesman said. The companies hope to market the battery in several years' time.

Reuter

Life Savers and Allen's Confectionery to merge

BY LACHLAN DRUMMOND IN SYDNEY

TWO AUSTRALIAN sweets manufacturing groups, Life Savers (Australasia) and Allen's Confectionery are to merge, a move which will create a confectionery combine to match the UK controlled Cadbury-Schweppes group in market share.

The decision to merge the two companies through the issue of shares in a new master company to existing shareholders comes a year after an abortive takeover attempt by Life Savers for Allen's in competition with Cadbury.

The new group will have total assets of A$135m (U.S.$125m) and a market capitalisation of a little less, based on the combined capitalisations.

Life Savers, with its bias towards chocolate-based confectionery, and Allens with its deeper involvement in sugar-based sweets, should provide a well balanced competitor for Cadbury, which has a roughly 25 per cent share of the confectionery market.

Cadbury recently sold its almost 15 per cent stake in Allen's to the Singapore group Jack Chia, which established itself as a shareholder during last year's bidding duel, as did the Rothmans group.

Life Savers shareholders will receive seven shares in the new holding company for every two already held, while Allen's holders will receive six for every two, a formula which will leave Nestle of Switzerland, Life Savers' largest corporate shareholder, with around 6 per cent of the merged group, a similar level to that of Chia and Rothmans.

Terry Dodsworth on a sector facing a spectre of financial collapse

U.S. nuclear plant problems pile up

HARDLY A DAY has gone by over the past month, or so, without another item of ominous news rolling in from the U.S. nuclear power industry. Gigantic cost overruns, accompanied by warnings of astonishingly long delays in completion times, are by now commonplace: what is frightening the industry is the spectre of financial collapse.

In the past few days this threat has moved palpably closer. The full year accounts of three large electrical utilities have been qualified by the auditors, in some cases using surprisingly straightforward and unambiguous language.

The accountants Peat Marwick Mitchell, for example, said earlier this month that if Public Service New Hampshire (PSNH) was unable to find additional sources of finance within three weeks, and the banks declined to advance funds, the company "would be forced to seek protection from its creditors under the Bankruptcy Code."

The consequences of the turnround in the fortunes of the hardest hit power companies border on the tragic in some cases. Utilities in the U.S. are conventionally regarded as "safe" stocks, favoured by investors who need a steady return and are happy to accept an average performance for little or no risk.

"I have been deluged with telephone calls from shareholders who want to know what has happened to their stock," says an official of Public Service of Indiana (PSI). "Many of them say that they have been living off the $12,000 or whatever that the dividends brings in—and that they do not know what they will do without it." PSI announced a 65 per cent cut in its dividend in January.

"I have been deluged with telephone calls from shareholders who want to know what has happened to their stock . . ."

A large number of these small investors have probably liquidated their positions by now, taking a heavy loss on the way. In the past six months, around 70 per cent of the company's shares have changed hands. Yet others are probably locked in for good, facing the prospect of drastically reduced income, or bankruptcy, yet unable to bear the capital cost of selling their life's savings.

The company's stock is now trading at a little under $8 a share, against almost $25 in July last year and a 12-month peak of around $29. Public Service New Hampshire's shares are now around $13, against $21½ last July, and Long Island Lighting Company's stand at just under $1, compared with over $16 in July. All these falls are well in excess of the market decline.

The market answer to this kind of misfortune is, of course, that equity investors take a risk. There are plenty of speculators doing just that at present as they pick up shares which in Lilco's case, to take one example, are trading at about a 60 per cent discount to stated net worth.

But the position is not quite so straightforward as the general dictates of the market place might suggest. In the first place, the nuclear utility business is a highly regulated one, in which the political organisations which make the rules can, and do, closely determine the operating parameters, including the permissible profits of the organisation. A ceiling on return on equity, for example, is enforced throughout the U.S. industry, designed to prevent the exploitation of consumers.

In principle, the concept of these hybrid concerns, public monopolies with a private funding base, has been to establish a system which gives everyone a "fair" return—shareholders, workforce and customers. They are so tightly regulated that PS Indiana, for instance, finds it impossible to go to the banks for refinancing without the permission of the controlling state agency.

Secondly, the rules of this carefully balanced game were changed entirely by the Three Mile Island disaster five years ago. "Any company that started its nuclear investment programme before Three Mile Island has faced the prospect of a financial crisis ever since," says one official.

The opponents of nuclear power claim that what has happened since simply shows how incompetent and shabby the industry had been in its work standards in the past. Many utilities that were not far into their investment programmes and could afford to abandon them did just that, with the result that around 90 plants have been cancelled in the last five years. But for those that remained, the problems of adapting to a more demanding environment have proved extraordinarily difficult.

In the first place they have had to face much heavier pressure from the environmentalist lobby, backed by increased public sympathy.

But even more importantly, the Nuclear Regulatory Commission (NCR) itself came up with exacting new requirements. Construction regulations were tightened up to the extent that builders complain today that they can hardly move without signing a form.

. . . Internally generated funds have provided only between 28 and 32 per cent of construction expenditures . . .

A harrowing history of the Diablo Canyon plant on the Californian coast shows how this has exposed the shortcomings of the industry. Started in 1978, it had to be completely redesigned and strengthened four years later to take account of an offshore earthquake fault. Its start-up has since been delayed because of 318 different reports of shoddy workmanship and difficulties at the plant which have had to be investigated by the NRC.

The financial impact of these new ground rules is difficult to exaggerate. The tighter standards mean spending much more money on construction, which has often had to be repeated to meet the requirements of the NRC. More crucially, however, they also involve vastly inflated financing costs.

These additional costs are closely related to the way nuclear plants are funded in the U.S. According to the Edison Electric Institute, internally generated funds have provided only between 28 and 32 per cent of construction expenditures in the last ten years.

The rest has come from massive issues of both debt and equity. In the decade to 1983, total common equity in the industry jumped from $40.9bn to $100.4bn, while preferred stock rose from $14.7bn to $28.6bn, and long-term debt from $63.6bn to $123.7bn.

The cost of servicing these funds as they are held for a longer period than originally planned scarcely needs to be emphasised. When the completion time on PS Indiana's Marble Hill project was stretched a further two years to the end of this decade, the price tag went up from $5.18bn to $7bn—and 75 per cent of that extra cost was in interest and dividends for the additional construction time.

At the same time, profits have come under increasing pressure. In part, this is due to a bad miscalculation of future energy trends. Back in the heady period when many of the new generation of nuclear plants were planned, forecasters were looking at demand increase in line with or even better than the 7 per cent experienced up to that date.

By contrast, between 1974 and 1983, growth averaged only 2.1 per cent, and for the rest of this decade the projections suggest similarly modest increases, of between 2.5 per cent and 3.0 per cent.

In many states, the utilities have faced a further earnings constraint. Several parts of the country allow the power generating companies to recover only a portion of their enormous construction costs—or even none at all—in their current tariffs. Customers can only be charged when a project comes on stream. Hence the troubled utilities have had every incentive to batten down the hatches and press on until the ran into the big cash generating phase when they brought their power stations into production.

As they abandon their plants, however, the companies are faced with what Wall Street would call a "double Whammy." They will be unable to gain access to the period when cash should be flowing in rather than out, and they will be forced to write off projects with book values far in excess of their own net worth—the recipe for bankruptcy.

Until a few months ago, the companies were still trying desperately to borrow their way out of this predicament. But for several utilities that option is now virtually closed.

The question now is whether the companies which have got themselves into this predicament will be allowed to go under or whether the regulators will move in and pick up the pieces. There have been no utility bankruptcies since the depression. To avoid them now, the authorities are going to have to step in with grants, push through some sort of reorganisation, or allow some undoubtedly unpopular scheme of additional tariffs to help them out of their fix.

TECHNOLOGY

EDITED BY ALAN CANE

Apple hopes for another windfall

APPLE Computer introduced a new version of its Apple II personal computer in San Francisco yesterday with the most elaborate product launch yet seen in the computer industry. Four thousand people were expected to attend the product "exposition" titled "Apple II Forever."

Apple will not reveal the cost of the day-long event staged in the city's new convention centre, but before the end of this year, Apple plans to spend over $20m on promotion for the new Apple IIC.

"Silicon Valley will never be the same," boasts Apple president John Sculley. With the Apple IIC launch, Apple Computer will introduce the concept of consumer marketing to the "high tech" industries of northern California, he claims.

The Apple IIC, an updated version of Apple II which represents well over 50 per cent of Apple Computer's revenues, will be aimed directly at consumers rather than business users of personal computers. With the IIC, Apple will fight back against the encroachments of IBM, with its "PC Junior" and Commodore, with it's "Commodore 64" into the home computer market.

Priced at $1,295, the IIC will compete directly with the similarly priced IBM PC Junior. Industry analysts predict that the Apple IIC, with a full size keyboard, neater styling and more available software will easily outsell the IBM home computer.

Apple's goal is to sell 400,000 IIC's before the end of calendar 1984.

For business users, the IIC has the advantage of portability. Weighing just 7.5 pounds, the IIC has a built-in keyboard and disk drive and can be hooked up to a television set or video monitor.

Apple's promotions will, however, aim the new portable computer at the "serious home user" according to Mr Sculley. "Apple has no intention of getting into the low end of the home computer market," Mr Sculley stresses. He even prefers not to call the IIC a "home computer"—the term has bad connotations, he explains. Losses among U.S. home computer makers last year far outweighed the combined profits of Apple and IBM in the personal computer market, he points out.

Apple is, however, ready to be price competitive if the home computer price wars should break out again. "The IIC could be a vehicle for price competition, if we chose to get into battle, but we may not," says Mr Sculley.

Commenting upon sales of the Apple Macintosh computer, introduced three months ago, Mr Sculley reported that 65,000 units will have been sold in the 100 days since the product's introduction, beating Apple's goal of 50,000 units. "We think that we could have sold 200,000 units if we had been able to build them," added an Apple executive. Shortages of key components for the Macintosh have however prevented Apple from further accelerating its production schedules.

"Nine months ago the world was ready to count Apple computer out. We came back and captured attention with the launch of Macintosh and now with the IIC we will prove that we are a consumer marketing company. We are coming out of the shadows. We are positioned for leadership," says Mr Sculley.

In a few months, Apple is expected to introduce a small liquid crystal display unit for the IIC and a battery pack. These will make the IIC into a "carry along" computer that can be used independently. As such it will become an attractive alternative to the cumbersome "transportable" computers offered by IBM, Compaq, Kaypro and several other IBM-compatible computer makers.

While dealers and analysts who have seen the IIC say they are impressed by the new machine, the Apple IIC is not expected to cause a major stir like Apple's recently introduced Macintosh.

The IIC will be an upgrade of an earlier model. It will, however, be very important for the future of Apple computer. With over 50 per cent of the company's revenues still coming from the Apple II, Apple cannot afford to make a mistake with the product's successor.

InfoCorp predicts, however, that Apple's IIC will continue to sell well beside the IIC. The market research firm reckons that Apple will sell 750,000 IIC this year, up from 650,000 last year.

Apple may still have some IIC secrets hidden — perhaps some new software, or even options to make the IIC capable of running programs designed for the IBM personal computer. In the past, Apple president John Sculley has promised such an enhancement for the Apple 11 line. For the moment, however, such details remain closely guarded.

LOUISE KEHOE

Steven Jobs with Apple's controversial Macintosh. New the company hopes that the latest version of the Apple II will also sell well

Professional Personal Computing

ROBOTS ASSEMBLE WINDSCREENS AT COWLEY

Eyes on Montego production line

BY GEOFFREY CHARLISH

AUSTIN ROVER, in conjunction with VS Technology Group of Luton, has installed an intelligent robot system with "eyesight" for the assembly of front and rear windscreens on the Montego production line at Cowley.

The customary rubber sealing gasket used in window assembly has been abandoned. Instead, a robot-dispensed line of sealant is run round the glass periphery and the windscreen is positioned and pressed directly into the car body. Austin Rover says that this not only improves the vehicle's aerodynamics and appearance, but produces a stronger body into the bargain.

Preparation of the windscreen takes place on a robotics platform erected several feet above the line itself. Here, primer and adhesive are applied by two Puma robots, each equipped with special grippers enabling them to interchange between the two kinds of applicator nozzle. There is a two minute cure period between the two processes during which the change is made automatically.

The Flowmatic metering and nozzle system dispenses an accurate triangular section bead of sealant, 12mm wide at the base, with an overlap joint at the start/finish point.

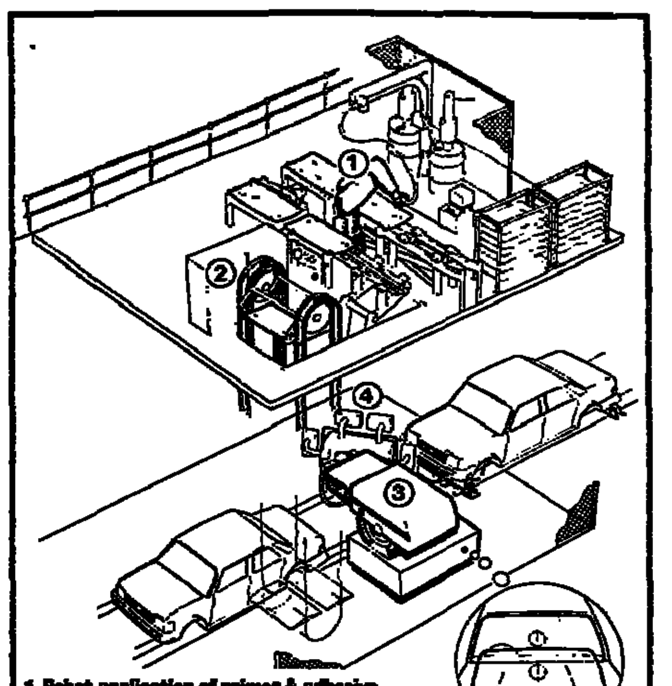
The vehicles have to be stopped and stabilised before the windscreens can be installed. With the assembly track in motion, the body shell is picked up by an under-body lifting device and accelerated forwards into the robot station, where it is held stationary for about 10 seconds while the two robots fit the screens.

The glass components are moved to the producton line on a vertical lift consisting of platforms—loaded by the Puma robot—which move continuously up and down on an endless chain. Each platform indexes to a pick-up position at line conveyor level. Here, the windscreen is picked up by a suction disc on a vision-controlled alignment fixture carried by a Unimate 4000 robot. Two such robots are deployed, to instal front and rear windscreens.

There are three stepper motors on each robot head which can adjust the suction screen-holding fixture to align the screen and position it 30mm from the aperture in the car body.

After that, the robots act independently, making use of data from four line scan cameras positioned so that they can "see" the edges of the aperture. The drive motors are suitably energised to position the glass to within one millimetre.

Once the correct position is found the robot presses the screen into the aperture and returns to collect another for the next body shell.



Today sees the unveiling of Austin Rover's windscreen assembly line for the Montego at Cowley. Robots with "eyes" are prominent

Testing

Finding faults at Hull

KINGSTON upon Hull, is the only city to run its own telephone network in parallel with British Telecom. Like BT its exchanges vary considerably in type from electro-mechanical to electronic creating a problem in identifying faults when they occur.

It was for this reason that Hull Telephone department decided to try out automatic test equipment which could quickly find faults. Fully digital exchanges which will eventually take over have inbuilt testing; older equipment does not.

Hull has 14 exchanges which serve 180,000 telephones over a distance of 120 square miles. It offers similar services to BT as well as information such as pigeon liberation information during the racing season and "dial a job."

The telephone department has just installed a computer system called 4tel from Teradyne, better known for its industrial test equipment. The Hull network comprises a single area network, 27 line testers and 16 visual display units. The department was one of the first in Europe to use Teradyne's test equipment.

Flexible manufacturing project by British Aerospace and Marvin

Component movement for easier automation

THE PROBLEM of satisfactory moving components and tools automatically at any time during a manufacturing process has held back the development of a true flexible manufacturing system (FMS). A joint project by the Midlands based Marwin Production Machines and British Aerospace (which is the subject of a patent) appears to have overcome a major problem and paved the way for the introduction of FMS.

It is some quarter of a century since Molin's System 24 introduced the FMS concept. This has three principles: that it should have the ability to produce at random; work unmanned for long periods; be able to move components and tools automatically.

When British Aerospace approached Marwin some four years ago, Marwin designers visited Japan, the U.S. and Germany to get abreast of the state of the art, only to find that the third problem had not been, in their opinion, entirely licked.

With the aim of producing a system that would work from the first day, well proven Bosch modules were chosen for material transfer and for the development of a crate shuttle base, which is the heart of the system. The crate shuttle, in which the tools are precisely located, moves horizontally in a square pattern. Each metal crate holds 63 tools (9 x 7), providing 31 tools per crate for each of the two spindles. Assuming that the material is in the machine and loading has not begun, the tool selector is then programmed to go to the required tool and load it into the tool changer.

Grippers pick up first one tool and then the other. A door opens in the machine, the changer moves in and simultaneously loads the tools into the two spindles. The door closes and the machine starts to cut. The tool changer is then ready for the next two tools in the programme. A feature is that the tool changer is interchangeable between different makes. Spindle speeds are infinitely variable up to 12,000 rpm and power is a maximum of 20 hp.

Air sensors indicate that the crate is correctly seated, with a repeatability of positioning of ± 0.013 mm. Tool changing time is 10 seconds, spindle nose to spindle nose. A complex aerospace component can be fully machined from the solid in under 20 minutes compared with some six hours by conventional methods, including setting times.

Marwin claims its system is more than twice as fast as any comparable one, will handle different components sequentially in steel and light alloys.

The machine, called the Automax, is available in a range of three, of which the Automax 1 is within a price range of £200,000 to £350,000 depending on specification. They will deal with envelope sizes of material from 12 x 24 x 4 ins to 14 x 6 x 1 ft.

The Automax 1 designed for BA's Preston factory will produce 660 different aircraft components on a random basis from the 12 x 24 x 4 ins envelope. The operational parameters include the ability to work unmanned day and night indefinitely.

So far, of four orders for Automax 1 received by Marwin, one is working in a customer's premises, one is on the shop floor and a third is being built. Marwin's initiative is a healthy sign that the depressed machine tool industry in the heart of the depressed West Midlands is fighting back with high technology products that puts the UK into the forefront of world leadership in FMS.

Details from Marwin Production Machines, Waddens Brook, Wednesfield, Wolverhampton WV11 3SS. Tel: 0902 65363.

UK COMPANY NEWS

Feb grows to £1.08m and lifts dividend

FURTHER GROWTH has been shown by Feb International, the manufacturer of chemicals and retail distributor of building materials. For 1983, turnover rose by £4.17m to £25.76m and profit before tax by £214,000 to £1.08m.

The directors are not expecting any changes which will significantly affect group prospects in the short term. They feel some concern at the proposed imposition of VAT on alterations and extensions to buildings, but trading results so far this year have been satisfactory.

The profit for 1983 was struck after depreciation £427,000 (£345,000) and interest £235,000 (£251,000). Tax takes £477,000 (£358,000) to leave the net profit at £599,000 (£504,000) for earnings of 3.78p (3.37p) per share. The final dividend is 1.833p for a net total of 2.64p, against 2.4p.

Group land and buildings have been revalued, and a surplus of £773,000 taken into the accounts. At the year end the net asset value per share came to 66.77p.

TR Berkeley Development Capital offer

TR Berkeley Development Capital is offering for subscription up to 3,000 ordinary shares at a price of $50,000 per share.

The company is based in Jersey and the directors say they will take whatever action is required to ensure that the company qualifies as a "distributing" fund.

The investments will be in the technology field in companies with turnover of at least $5m or expected to achieve that rate in the current year. Investments will average around $5m and up to 40 per cent of the equity. The directors expect to invest in 20 to 30 companies and will cease business in five years unless otherwise determined by shareholders.

Applications open on May 24 in London and must be for a minimum of 20 shares and in multiples of five with a minimum level of aggregate applications of 1,000 shares. The company will be listed on the Luxembourg Stock Exchange.

Bentalls

Real growth in sales volume and the benefit of interest savings resulted in a 24 per cent increase to £2.61m, against £2.12m, in full year taxable profits at Bentalls.

But since the January 28 year end, trade of this department store operator has been disappointing and sales are running below budget, the directors report.

Sales for the 1983-84 year, excluding VAT, were 9 per cent higher at £58.38m (£53.56m) and operating profits expanded by £449,000 to £2.77m—interest payable was £168,000 (£220,000).

The final dividend is 0.1p higher at 1.4p for a total of 1.75p (1.6p).

Yearlings rise

The interest rate for this week's issue of local authority bonds is 9½ per cent, up 1/16 of a percentage point from last week, and compares with 10½ on last year's comparable date. The bonds are issued at par and are redeemable on May 1 1985.

A full list of issues will be published in tomorrow's edition.

Nurdin & Peacock rises to £12m and pays more

IN THE second half of 1983, Nurdin & Peacock recovered the ground lost at midway to finish the year with pre-tax profits ahead from £11.33m to £12m, on increased sales of £516.41m, against £462.46m.

At the interim stage, when reporting slightly lower pre-tax profits of £3.23m (£3.37m), the directors said they would be disappointed if the company did not produce higher profits for the year.

After reduced tax of £3.87m (£4.69m) net profit for the year went up from £6.64m to £8.13m. Comparatives have been restated and 1982 profits have been reduced by £72,000 to allow for a change in accounting policy in providing for deferred tax.

Earnings per 10p share rose from 19.3p to 20.3p before tax, or from 11.3p to 13.8p after tax. The final dividend is increased to 2.1p (1.82p) net for a total 0.45p higher at 3.57p. Dividend payments cost £2.06m (£1.77m)—Mr W. M. Peacock, the chairman, has waived the dividend on his shareholding.

Mr Peacock reports that 1983 was a tough year with competition old and new trying to make inroads into the company's business. As regards the current year, there is no let up in the pressure. However, the start has been encouraging, with sales continuing to show a good increase.

The company will be opening its new branches at Swansea in May and Keynsham later in the summer and the chairman has high hopes that both will contribute substantially to sales this year.

Building work is well under way for a new branch at Gloucester, to be opened next year, and negotiations for other sites are at an advanced stage. The company's management team is working on various projects and is well advanced with installations of a new administration system which will enable its branches to tighten up control of their businesses.

Profits for 1983 were after providing £632,000 (£596,000) for the staff share participation scheme. The company is proposing to increase the share of profits allocated to the staff by one-fifth—from 5 per cent to 6 per cent—and also the maximum individual amount to that permitted by present legislation.

● **comment**

While the derating of Nurdin and Peacock's shares over the last year should have finished by now, it is hard to see where the company goes from here. An efficient cash and carry operator, seeing its customer base — the independent grocers — squeezed by the all-powerful multiples, can do little but take a larger slice of the reducing cake, and hope that the Office of Fair Trading can come up with something to redress the balance of power. Last year Nurdin increased its share, getting an extra 4 per cent volume through existing branches and adding around 5 per cent to sales area. But margins were the sacrifice. Given that around £400,000 of the pre-tax profits rise came from higher interest received on Nurdin's cash mountain, margins were distinctly slimmer. This year there will be two more new branches, and there is no reason why Nurdin should not beat its competitors again. Earnings jumped in 1983 as the tax charge sank, largely thanks to building in Swansea—a development area—and leasing. This year, even if profits reach the £13½m mark, earnings could be static giving a p/e ratio of around 10½ with the shares unchanged at 146p. That looks cheap against the sector, but it may well stay that way.

William Morris coming to USM

BY WILLIAM DAWKINS

ADMIRERS of some of London's most famous sculptural landmarks will soon have an opportunity to invest in the company which made them.

William Morris Fine Arts, which owns the 130-year-old Morris Singer metal sculpture foundry and which has recently diversified into the wallpaper trade, is coming to the Unlisted Securities Market.

Morris Singer's castings include the figure of Justice on top of the Old Bailey, the mermaid fountains in Trafalgar Square, and London Zoo's Guy the Gorilla in bronze.

The group is raising £500,000 from a placing of 5m new shares of 10p each at par, representing 12 per cent of the enlarged equity.

Last month, Morris Singer issued 1.3m 10p shares to acquire Peterlee, a maker and distributor of wallpapers, which claims to have 30 per cent of the washable wallpaper market.

In the year to last December, Peterlee made a pre-tax profit of £355,000 on turnover of £2.53m, while Morris Singer produced £148,000 on sales of £1.09m. For the current year, the directors are forecasting that the combined group will make not less than £700,000 pre-tax.

If the combined group's profits had been available for a full year, the total net dividend would have been 0.25p, giving a gross yield at the placing price of 3.57 per cent.

William Morris is coming to the USM via a reverse takeover of rule 163 company Ceylon & Indian Planters' Holdings, which has no trading interests. Since there is a £40,000 deficit on Ceylon & Indian's reserves and a third of the group's profits will not be available for distribution, being pre-acquisition profit, the directors are planning a dividend of 0.1p per share for the current year.

Brokers to the placing are Le Mare, Martin and dealings are expected to open next Monday.

● **comment**

Given the eye-catching nature of William Morris' foundry business, investors should not lose sight of the 70 per cent of its turnover which is in wallpaper. Now that Peterlee has taken a hefty slice of the washable wallpaper market, with its emphasis on cheap products with pricey-looking designs, it plans to use the placing money to broaden its coverage. The aim is for non-washables to increase their share of Peterlee's sales from 40 per cent to more like 60 per cent. In its foray into this more competitive area, Peterlee will no doubt depend heavily on Morris Singer's considerable design expertise. The corporate status gained from a quotation might make the [illegible] (no relation) turn in his grave. But it will make it easier for Singer to get performance bonds which its bigger official customers are demanding as backing for downpayments. Oil producing countries' financial difficulties are doing nothing to diminish their appetite for Singer-cast public sculptures, and they are taking a growing share of the foundry's business. The market for the shares is narrow, and the conservatively pitched rating should see the price off to a lively start.

Promising prospects for Emess

FOR THE 18 months to end-December 1983, Emess Lighting earned taxable profits of £703,000 compared with £337,000 achieved in calendar 1982.

And the current year promises further progress for this seller of its own and imported decorative lighting fittings, the directors state. They point out that after the recent Michael Black acquisition, Emess has pro-forma net tangible assets of £4.5m, some £1m in cash and liquid assets, no debt and an enlarged trading base.

Commenting on the 18 month period, the directors say that Emess Lighting (UK) and Poole Lighting both performed well in a competitive trading environment. The considerable amount invested in product development, new plant and computerisation has been reflected in the increased amount of market share.

This strategy has resulted in the company's own UK manufactured turnover doubling during the past three years in a industry that is largely import based. Further growth from both subsidiaries is anticipated for 1984.

Group turnover for the period was £6.53m (£3.17m for 12 months) and taxable profits were struck after costs and overheads, less other income, of £5.83m (£2.84m).

A final dividend of 4.25p makes a total of 12.25p for the 18 months on capital enlarged by a rights issue, compared with 7.5p. Earnings per 25p share are shown as 33.4p (19.4p).

Tax took £171,000 (£59,000) and extraordinary debits accounted for £46,000 (£22,000).

Last August Emess commenced trading through a new division in the table lamp and lampshade market. Profit achieved during its first five months of trading was above expectations. This trend has continued during the first quarter of the current year.

In December Emess completed the acquisition of a 35 per cent shareholding, for £300,000, in Mercury Plastics. No contribution from Mercury is included in the results and the directors anticipate further progress during 1984, particularly as its manufacturing capacity has recently been substantially increased.

£1m profit puts Helene well over forecast

PROFIT BEFORE tax achieved by Helene of London for 1983 is well above the forecast made with last August's rights issue. At £998,423 it compares with some £800,000 estimated and with £543,390 recorded for the year 1982.

The final dividend is 1.11p to maintain the net total at 1.48p on the higher capital. At the time of the rights Helene also bought J.D.K., a company engaged in the importing, wholesaling and distributing of fashion leisurewear (including knitwear, shirts and jeans) and fitting into the group activities.

Group sales for 1983 advanced by 53 per cent, from £10.56m to £16.2m, and the increase in the pre-tax profit was equal to 84 per cent. Current trends indicate a further "satisfactory increase" for the current year, the directors tell shareholders.

After tax £442,000 (£242,000), minorities £86,165 (£1,669), and an extraordinary debit last time of £89,236, the net attributable profit is £470,258 (£210,485). Earnings are shown at 2p (1.4p).

There is a provision of £523,892 deducted from retained profits for interest and costs of past tax.

● **comment**

Helene has beaten its rights issue forecast by a decent margin, although it is still a long way from making the £1.7m it produced in 1979 before the recession tore into the fashion trade. The market expected as much and left the shares unchanged at 26½p, where the yield is 8.3 per cent and the multiple of stated earnings is 12.7. The brightest spots were childrenswear, where L.C. (Tailorwear) has been making inroads into the U.S. on the back of sterling's weakness, and JDK, whose leisure clothing has been a beneficiary of the buoyancy of the leisure industry. The rights issue proceeds have combined with improved cash flow to turn the previous year's overdraft of £400,000 into a cash balance of £1.4m. That leaves plenty of scope for Helene to return to the acquisition trail. If past patterns are anything to go by, it will be looking for something to build onto an existing activity, just as last year's purchase of L.C. Tailorwear consolidated its position in children's coats.

Clement Clarke falls to £2.15m

Contrary to mid-term expectations, taxable profits at Clement Clarke (Holdings), dispensing optician, declined from £2.73m to £2.15m for 1983. The company is to pay a final dividend of 2.75p, giving a total of 4.0625p (3.5p adjusted to allow for a scrip issue).

At the interim stage, the directors said second-half results looked promising and they expected final results for 1983 to confirm the usual steady growth.

Group turnover improved slightly from £16.03m to £17.56m, and there was a reduced tax charge of £1.03m against £1.3m. An extraordinary charge of £166,000 was made for deferred taxation as a result of the Budget proposals, from attributable profits of £1.12m (£1.43m). Earnings per 25p share were down from £17.84p to 14.03p.

Rush & Tompkins up 22% and puts 1.5p on dividend

SHAREHOLDERS IN the civil engineering and property investing Rush & Tompkins Group are to receive a 1.5p increase in their dividend for 1983 as the profits have hit a record. At the pre-tax level they have moved ahead by 22 per cent, from £2.31m to £2.82m.

The final dividend is 5.25p for a net total of 7.25p, compared with 6p. Over the past two years profits have risen by 65 per cent and the dividend by 71 per cent.

The directors report that the current year has opened on a satisfactory basis. They are hopeful that results will once again show improvement and maintain the rising trend established over recent years.

Borrowings remain "somewhat higher" than in recent years but the great bulk is used in the property development and investment divisions at home and overseas. "They remain an acceptable proportion (less than 50 per cent) of the total capital employed.

The property development programme in the U.S. is substantial but it has been arranged so as to minimise both the call on group resources and its exposure to risk, the directors point out.

Turnover came to £86.34m (£91.87m) in the year, while net rents totalled £2.25m (£1.82m) and trading profit £3.51m (£3.03m). Interest charges were £2.59m (£2.17m).

In the UK construction side, full integration of the building and civil engineering businesses was completed at the beginning of the year. Retail work accounted for about 30 per cent of total turnover with a wide variety of contracts, and a further 30 per cent stemmed from office schemes — the principal one being a £4.5m project for Norwich Union. The civil engineering sector has remained difficult but the group has managed to obtain its fair share of the available work.

Activity on the UK property side consisted mainly of progressing the several development schemes obtained with the purchase of Arlington Developments at the end of 1982; continuing to rationalise the land and property holdings and updating the investment portfolio; planning for new major developments to carry the group into 1985 and 1986.

The UK portfolio was valued at the end of 1983 and now stands at £45.94m, or 13 per cent more than 12 months ago. It comprised, by value, offices 63 per cent, retail 12 per cent and industrial 25 per cent. Gross annualised rent at the year end was £4.6m, some 10 per cent higher than in 1982.

North America is seen as an area of major expansion for the group's activities, mainly in property development and investment for its own account, and the provision of management services for other U.S. and foreign investors.

Good progress has been made on the Piedmont Mall, Danville, Virginia, which is due to open this August. Rush has a 50 per cent interest in the general shopping area totalling 193,000 sq ft of which over half is let or under active negotiation at rents appreciably above the original projections. Rush's investment was valued independently at the year end and produced a revaluation surplus of $1.7m.

Rush has continued to establish the permanent organisation for its world-wide construction business. An experienced managing director has been appointed to the Singapore company; a company is being registered in Saudi Arabia and the group has consolidated its presence in the Caribbean. The back up services, both in Holland and the UK, have been further extended.

The group is discussing the formation of consortia able to offer full turnkey facilities for suitable projects covering design, construction, finance and operational management.

After tax £546,000 (£505,000) and minorities £6,000 (£11,000), the net attributable profit for 1983 is £2.28m (£1.81m), and there are extraordinary debits of £118,000 (£45,000). Earnings are shown at 20.7p (16.4p).

At the year end net asset value per share was 379p, against 341p the year earlier.

● **comment**

The most significant element in these results is the expansion by Rush and Tompkins of its property interests while the construction side has been under pressure. In the UK, the group is digesting the late 1982 acquisition of Arlington Developments, at £8.75m its biggest recent single deal. In the U.S., Rush is towards the end of a shopping centre scheme in Virginia and has begun another in New Jersey. These developments are the main reason for an increase in borrowing from £24m to £33m (taking gearing close to 100 per cent), but the fruits in the form of bigger profits should already be seen this year. On the construction side, trading overseas was hit by delays over a £15m Ethiopian contract and in the UK by recession. Rush intends to generate more of its income from overseas in the future—looking for orders in the Middle and Far East and in West Africa in the construction business, and to the U.S. in property development. For the within reach; the shares at 254p, up 2p, are on a prospective p/e of just under 10, assuming a 20 per cent tax charge, and yield 4.2 per cent.

Caparo hits target with 60% advance to £1.93m

PRE-TAX PROFITS of Caparo Industries jumped by 60 per cent from £1.22m to £1.93m in 1983, in line with last month's forecast of more than £1.8m. Turnover climbed by neary £30m to £82.1m.

The directors expect the group to show continued satisfactory growth in pre-tax profits, both from improved performance of existing businesses and from further acquisitions. This growth should be achieved with present demand levels, they state, even though these still do not show significant signs of sustained recovery in the industrives which Caparo serves.

Reflecting the 1983 profits advance and confidence in the group's future, the dividend is being lifted by 20 per cent to 1.5p (1.25p) net with a final of 0.85p per share.

Earlier this month, Caparo announced the sale of its investment in Brockhouse and the decision not to proceed with an offer for the company. It now estimates that this will result in a surplus on disposal of some £1.04m, before allowing for the costs of the capital injection and takeover proposals of £0.22m. The net surplus before tax of £0.82m will be included in the 1984 results.

Profits in 1983 from trading activities rose from £1.54m to £2.76m, while investment activities contributed £0.92m (£1.32m). Interest payable increased from £1.34m to £1.75m and 1982's pre-tax results were after charging exceptional items of £0.31m.

Tax took £288,000 (added £531,000) and there were also extraordinary debits of £405,000 (£728,000)—mainly relating to closures and restructuring of continuing businesses. Earnings per 25p share were 4.62p (3.22p) before tax and 3.86p (4.63p) after.

A divisional analysis of pre-tax profits shows (in 000's):—industrial services ££372 (£188 loss); metals £276 (£269); engineering £180 loss (£388 profit); Barton division £647 (nil); property £500 (£517); less head office costs £339 (£358).

Improved figures in the industrial services division arose from the return to profitability—albeit modest—of CMT Industrial Supplies and a full contribution from the forktruck businesses.

The small loss in engineering was a temporary factor, says the directors, caused mainly by the lack of any major contracts for the Acme Conveyor subsidiary. This company's assets have been disposed of since the year end and the engineering division is expected to return to profitability this year.

The Barton division traded in line with its profits forecast of not less than £1.2m and the Caparo's 1983 results included a contribution for the seven months since the acquisition.

Tax took £74,000 (added £266,000) and extraordinary charges fell sharply from £1.97m to £242,000.

● comment

As the shares in Caparo Industries stand just about at their midpoint of the 1984 trading range with a ½p rise yesterday to 43½p, shareholders could be forgiven for thinking that the better turn is to be made from spotting Caparo's next bid target. Brockhouse, after all, yielded generous pickings and Brown and Tawse, up 2p to a new 1984 peak of 115p, still fits within Caparo's £30m-£25m takeover parameters. Otherwise, Caparo is making good progress despite the sluggish performance of its chosen areas of the economy. Industrial services takes the plaudits for 1983 and the Barton acquisition looks fully up to scratch. Engineering is plainly a disappointment but the Acme disposal should be worth about £200,000 in loss elimination this year and divisional development spending looks to have been written out against the top line rather than being capitalised as in the past. The bull point for the shares is the strong advance at the operating level, tempered by the erratic nature of investment gains and, of course, the effect of Budget tax changes. The p/e of 11.1 on actual tax and a yield of 5 per cent seem fully abreast of events for the moment although the group can be expected ot deal quite heavily in the acquisition market at any time.

Second half lifts profits at Anchor Chemical

DESPITE A difficult year, Anchor Chemical Group achieved higher taxable profits of £641,000, against £553,000, in calendar 1983.

Second half profits virtually doubled from £220,000 to £431,000 and more than offset the £123,000 shortfall incurred at midway. Turnover for the 12 months was nearly £1m higher at £14.23m (£13.32m).

Last year's profit included an exceptional credit of £85,000 (debit £17,000).

But the low worldwide demand, seen in the latter part of 1982, continued at the depressed level in the first half of the year and resulted in more cost cutting actions in the UK. These included further reductions in manning, and cost the company £72,000 (£75,000) in redundancy payments.

This action together with improved market conditions enabled the UK companies to trade profitably in the final quarter, the directors report.

Elsewhere, higher aggregate profits were earned by the overseas companies.

The final dividend is lifted from 2p to 2.25p for a higher total of 3.25p (3p), with earnings per share pre-extraordinary items shown as 9.25p (9.87p) and 6.72p (7.26p) after.

Retained profits come out at £99,000 (£121,000) after tax of £374,000 (£269,000), dividends of £96,000 (£88,000) and extraordinary debits.

USM placing gives £1.4m valuation to Plan Invest

Plan Invest, a company advising investors on portfolio investment in unit trusts is coming to the USM. It is placing a total of 1,078,000 10p shares—49 per cent of the equity—at 62½p per share, valuing the entire company at £1.38m.

The issue, sponsored by stockbrokers Robert Wigram & Co, will leave chairman Mr David Trimble and managing director Mr Peter Haynes owning 51 per cent of the capital between them. Besides realising part of their investment, the issue is intended to give the group—which is based in Cheshire—wider publicity among the investing public, and also to create opportunities for acquisition in the area of financial planning.

Between 1979 and 1983, group turnover increased from £186,000 to £390,000, and pre-tax profit grew from £34,000 to £155,000. Profits in 1983 were 78 per cent ahead of the year before. No forecast is given for hte current year, but management accounts indicate a satisfactory start to the year, and the directors will be "disappointed" if last year's profit figure is not bettered.

Subject to unforeseen circumstances, the directors intend to pay an interim dividend in November 1984 of 0.55p net, and a final in May 1985 of at least a similar amount. At the placing price, the expected yield is 2.5 per cent, and the historic multiple is stated as 15.8.

Besides advising on the choice of unit trusts, the group operates a full financial planning service for its clients, covering taxation, life assurance, mortgages and school fees. A subsidiary, PILAPS, operates its insurance broking and pensions interests, and a related company, HCPI, provides a financial planning service in association with Manchester-based stockbrokers, Henry Cooke, Lumsden.

● comment

On the face of it, the flotation of Plan Invest suggests that the bull market is getting out of hand. The proposition, after all, consists of investing in a company which advises investors on which investment advisors to invest in. And certainly, the arrival on the USM of a company with 13 employees and a total market capitalisation of £1.4m tests to the limit the principle of giving small companies access to the savings of the general public. As things stand, though, there is commercial logic to the scheme. The immense proliferation of unit trusts lately—many so specialised as to be deliberately risk-prone—does argue the need for specialists to guide the layman through the maze. Arguably, we are still in a world-wide bull market, and a corresponding bear market would certainly cause the company problems. But a small group of investment specialists, with a group of loyal and wealthy clients, could well be flexible enough to weather that particular storm.

Thomas Warrington downturn

Difficult conditions in contracting and continued pressure on margins was experienced by Thomas Warrington & Sons in 1983.

Turnover rose from £9.94m to £12.28m, but pre-tax profits declined from the previous year's record £616,000 to £419,000. The group completed the sale of all but one of the non-commercial properties in its portfolio, but a higher proportion of lower priced houses was sold during the year.

The acquisition of J. Wilson (Heywood) came too late in the year to have a material effect on the results, but the directors intend to expand the activities of this company.

The housebuilding programme has been materially increased and in 1984, given the continuation of buoyant demand, the board expects a better result due to an increase in the proportion of higher priced housing.

An unchanged final dividend of 4.41p holds the total at 6.16p net per 25p share. Tax took £161,000 (£243,000), and there was a £77,000 extraordinary debit this time, being an increase in the deferred tax provision.

Laurence Gould pays more than forecast

PRE-TAX PROFITS at Laurence Gould, agricultural consultants, improved by 31 per cent to reach a record £345,000, against £264,000, for calendar 1983.

The company, which obtained a USM listing last June, will pay a final dividend of 1.85p to make a total 3.15p, compared with the 2.975p prospectus forecast.

Turnover, including that of the subsidiary ULG Consultants which has just won a Queen's Award for Export Achievement, also showed substantial improvement to rise from £2.92m to £3.86m. Trading profit, before costs of £46,000 (£34,000) for the staff profit sharing scheme, reached £391,000 against £298,000. Tax was up from £91,000 to £153,000.

Mr Laurence Gould, the chairman, is encouraged by the group's financial structure and will look for opportunities for expansion. The company acquired early this year the major fishery consultancy group Fisheries Development to complement its international activities, and is considering new growth in the agricultural market research sector

The company should benefit from the reduction in corporation tax and the abolition of the National Insurance Surcharge announced in the Budget. The current order book is 75 per cent contracted, and while there is still work to be sold the company is taking a long-term view.

COMPANY NEWS IN BRIEF

Net asset value at the New Australia Investment Trust, a specialist in the natural resources sector, rose by 16.3 per cent in the six months to March 31 to reach 113.9p per share against 69.9p for the comparable period. As was the case last year, there will be no interim payment. Last year's final amounted to 1.5p.

Pre-tax profit was down from £128,000 to £82,000, but the directors state that profitability showed a sharp increase in the second half and expect a 20 per cent improvement in the current year.

They anticipate that this will be a record year for oil and gas exploration activity, and have placed more emphasis on the natural resources sector of the portfolio.

* * *

AB Electronic Products Group has received acceptance for 4,702,583 new ordinary shares (96.3 per cent) in respect of its recent one-for-three rights issue.

* * *

Acceptances to the Bowater rights issue were received in respect of approximately 95.89 per cent of the shares offered. The balance has been sold in the market at a premium for the benefit of provisional allottees.

* * *

In view of an improvement in profits, the directors of Moss Bros, tailors, are recommending a higher final dividend of 3.25p, against 2.5p, for a 4.79p total, and also propose to make a one-for-five scrip issue.

For the 12 months to January 28, 1984, pre-tax profits advanced from £502,000 to £649,000, on turnover £5.73m higher at £16.79m, after an exceptional debit of £120,000 contribution to pension scheme, and after interest payable of £109,000 (receivable £19,000). Other income added £53,000 (£52,000).

The increase in profits was largely due, says Mr M. G. Moss the chairman, to the continuation of very tight controls over margins and expenses, together with the benefits related to the Fairdales acquisition.

Net profits came out at £395,000 (£297,000), after tax of £254,000 (£205,000), and earnings per share totalled 15.67p (11.78p).

* * *

Taxable profits rose from £549,000 to £736,000 at Boosey & Hawkes, music publisher and instrument maker, for 1983, on turnover up from £31.22m to £34.2m. At the interim stage, pre-tax profits were £481,000 against losses of £659,000.

However, retiring chairman Sir Richard Young says second half profits did not bear the same relationship to the first half, as in 1982.

Tax took £437,000 (£389,000), and minorities £32,000 (£16,000). There was an extraordinary credit last time of £5,000.

A final dividend has been recommended of 3p (2.3p) making 5p (2.3p) for the year. Earnings per 25p share improved to 6.5p (3.4p).

Sir Richard says 1984 started with some difficult weeks which will set back the first-half results. Progress should then be resumed in realising potential.

* * *

The effect of the reorganisation is coming through at Bardsey, and is reflected in the results for 1983 which show a profit before tax of £74,000, after a loss of £80,000 in the first half, and compares with a loss of £250,000 in the year 1982. The nominal dividend is 0.05p, against 0.1p.

In the current year the gradual improvement in trading has continued and the first three months are showing a better result than for the same period in 1983.

Bardsey is an industrial and finance group with main interests in furniture, hand tools, and property investment. Its sales in 1983 showed little change at £34.06m (£34.7m) nor did the gross profit of £8.58m (£8.48m). After a tax credit £276,000 (£28,000) the net profit is £350,000 (loss £222,000) and earnings are 0.02p (loss 1.89p) per share. In addition, there is an extraordinary loss of £321,000 (£963,000).

* * *

Net asset value at English National Investment rose from 189.5p to 231p per preferred ordinary share and from 114.5p to 156p per deferred ordinary share for the year ended March 31. The directors are proposing respective final dividends of 6.15p (5.75p) and 3.7p (3.3p) to lift the totals from 10p to 10.55p and from 5.1p to 5.65p.

Group income, including dividends and interest received, rose slightly from £295,000 to £313,000. There were unchanged interest charges and expenses of £65,000 and tax absorbed £74,000, up from £71,000. The company intends a capitalisation on the basis of one new preferred ordinary share for every two preferred or deferred shares held.

* * *

Pre-tax revenue at First Charlotte Assets Trust improved from £31,000 to £91,000 in the year to March 31 1984. Income was £221,000 against £103,000, and interest and expenses took £130,000 compared with £72,000. Tax was up from £11,000 to £27,000 and earnings per 5p share rose from 0.06p to 0.11p.

The dividend is effectively raised from 0.04p to 0.05p.

At the year-end, net asset value reached 12.1p—54 per cent above the original issue price, and 13 per cent higher than a year ago.

Most of the monies raised by the earlier rights issue was invested during the second half of the year and, together with the heavy dealing costs, meant that the net asset value did not fully benefit from the strong USM performance.

* * *

The fall in profits at Benford Concrete Machinery for 1983 turns out to be £420,000, after a £480,000 drop at the midway stage. Group profit before tax for the year came to £1.78m, compared with £2.2m, on turnover £2.88m lower at £18.52m.

Although that company's results are disappointing, the directors cannot be dissatisfied with them in the circumstances. The new line of aerial work platforms made progress, although more slowly than expected. In South Africa, Bensa profitably completed its first full year of operations.

Tax takes £746,000 (£735,000) to leave the net profit at £1.04m (£1.47m) for earnings of 4.62p (6.61p) per share. The final dividend is 2.75p for a net total of 3.75p (3.48p).

DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corre-sponding div.	Total for year	Total last year
Anchor Chemical	2.25	June 9	2	3.25	3
Bardsey	0.05	—	0.1	0.05	0.1
Bentalls	1.4	June 13	1.3	1.75	1.6
Caparo Industries	0.85	June 11	0.75	1.5	1.25
Clement Clarke	2.75	—	2.35*	4.08	3.5*
Emess Lighting	4.25¶†	—	4.5	12.5¶	7.5
English National**	3.7	July 4	3.3	5.65	5.1
English National‖	6.15	July 4	5.75	10.55	10
Feb Intnl.	1.84	May 31	1.65	2.64	2.4
Futura Holdings 2nd int.	2.75	May 14	2.25	4.25	3.56
Laurence Gould‡	1.85	—	—	3.15	—
Helene London	1.11	June 30	1.11	1.48†	1.48
Moss Bros.	3.25	July 12	2.5	4.79	3.55
Nurdin & Peacock	2.1	July 9	1.82	3.57	3.12
Rush & Tompkins	5.25	—	4.35	7.25	6
Thos. Warrington	4.41	July 3	4.41	6.16	6.16

Dividends shown pence per share net except where otherwise stated. * Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ USM stock. § Unquoted stock. ¶ For 18 months to December 31 1983. ‖ For preferred ordinary shares. ** For deferred ordinary shares.

UK COMPANY NEWS

BIDS AND DEALS

Black & Edgington committed to travel and holiday sectors

BY CHARLES BATCHELOR

Black & Edgington Holdings (B & E), part of Mr Michael Ashcroft's Hawley Group empire, yesterday announced the sale of three non-essential businesses. B & E is concentrating its resources in the travel and holiday sectors.

It has sold Clares Carlton, part of its clothing division, and a number of freehold properties to the Clares management for about £862,000.

Clares made a pre-tax loss of £204,000 on turnover of £3.9m in 1983. It had net assets of £1.5m at the year end. B & E has already provided for the loss on the sale in its 1983 accounts. The buyers may defer payment of £289,000 for up to 18 months.

B & E has also sold Thomas Black & Sons (Canada), its Canadian retailing operation, to Mr R. Brown, the managing director of the company for £335,000.

The Canadian offshoot made a pre-tax loss of £20,000 in 1983. It had net assets of £335,000 at the year end. The purchaser will pay £225,000 on completion and the balance on December 31 1984.

In a third deal B&E has sold its 50 per cent stake in Milletts Shops Scotland to its partner, Milletts Leisure Shops, for about £10,000.

Milletts, which has about 100 stores around Britain, has been managing the seven stores involved. They have been "reasonably profitable" on annual turnover of about £2m, Mr Fernand Duchezeau, Millett's finance director, said.

The Scottish company was set up by the two partners in 1978 and now comprises two stores in Glasgow and one each in Edinburgh, Dundee, Aberdeen, Clydebank and Swansea.

Milletts recently opened a 2,500 sq ft store in Perth. Last week it reached agreement to buy 12 Chelsea Boy shops in Scotland for £720,000 from Lewis Enterprises (Gents Wear).

Milletts' shares rose 2p to 132p yesterday while B&E was unchanged at 108p. Hawley earlier this month increased its stake in B&E from 50.1 per cent to 75 per cent.

Thorn offshoot share offer

Thorn EMI (Australia), part of the British electronics and electrical group, plans to offer 25 per cent of its shares to Australian investors in a move which will raise A$26.1m (£17m).

This is to meet an undertaking given to the Australian government at the time of the merger between Thorn Electrical Industries Pty and EMI (Australia) in August 1981.

Thorn EMI (Australia) announced yesterday it will issue 10.44m of its own shares at A$2.50 per share. Subscription lists will open tomorrow.

The Australian group now comprises eight businesses ranging from home entertainment to high technology. It expects after-tax operating profits to reach at least A$11m in the year ended March 31 1984 and to pay a dividend of 15 cents a share.

The issue has been underwritten by Ord Minnett, stockbrokers and members of the Sydney Stock Exchange.

BIDS AND DEALS IN BRIEF

London Sumatra is now a wholly-owned subsidiary company of **Harrisons & Crosfield.**

* * *

W. Canning has sold its factory in Constitution Hill, Birmingham, for £100,000. The business has been transferred to the group's main manufacturing complex.

* * *

John Lewis Partnership bought in the market for cancellation 10,000 of its 5 per cent cumulative preference stock at 45½p per £1 unit.

* * *

In a cash and share deal, **Peerless**, the Birmingham-based plastics, electronics, domestic engineering and metals concern —is acquiring **Chrisfield Limited** and **Chrisfield (UK)**—manufacturers of injection, compression and structural foam moulds for the plastic moulding industry—together with the 50 per cent of **Mouldmaking Design Centre** not already owned by the group.

The consideration is £250,000 in cash, 90,000 Peerless ordinary shares of 25p and certain deferred payments depending on royalty income, but *not* to exceed £120,000.

The total net tangible assets of the three companies amount to £298,000 (MDC contributes £54,000) and total 1983 pre-tax profit of £90,000 (which includes a nine months contribution from MDC of £25,000).

* * *

Seagram Distillers, the wine and spirits group, has completed its purchase of a 75 per cent interest in the wine and spirits retailer, **Oddbins UK**. The purchase price was £3.675m.

* * *

Corporate Financial Services has acquired 83.76 per cent of **Dura Mill**. It purchased a total of 129,165 shares at 225p each from Dura's chairman Mr Fitton and his privately owned company, Associated Spinners. It also purchased 38,350 shares from other shareholders.

Corporate will make a 225p cash offer for the remaining ordinary in Dura, and will endeavour to maintain Dura's Stock Exchange listing by way of a share placing.

* * *

The following mergers are not to be referred to the Monopolies Commission: **Britannia Arrow Holdings** for **Singer and Friedlander**; **Citicorp** for **Vickers da Costa (Holdings)**—including a 29.9 per cent interest in **Vickers da Costa**; **Hambros'** 29.9 per cent interest in **Strauss Turnbull**; **Morgan Grenfell's** 29.9 per cent interest in **Pinchin, Denny.**

* * *

Electra Risk Capital II has made investments totalling £1.06m in three companies under the Government's Business Expansion Scheme. These latest investments bring to £8.55m the amount invested in 25 companies in Electra Risk Capital's second fund at April 5, 1984.

Electra's first investment was of £452,253 for new ordinary shares representing 35 per cent of the enlarged share capital of **AMK Pipe Technology**. Its second fund has at the same time invested £360,000 in Webb Lloyd, manufacturer of architectural fittings, run by Mr Tony Webb and Mr Geoff Lloyd following a buy-out of these interests from the Sheffield Brick Group.

Finally, Electra and Advent Technology (together with Advent Eurofund) have both subscribed £250,000 for 40 per cent each of the share capital of Shaw Cable (Management and Development).

* * *

Dares Estates, a London and Hampshire-based property investment group, has completed the acquisition of **Rogate**, a London-based property company.

The acquisition has been satisfied by the issue to Rogate of £2,600,000 of 10 per cent secured loan stock 1988 of Dares'.

Rogate owns a portfolio of freehold and leasehold commercial properties in and around central London, with a current market value of £5.215m. All properties are fully let, and produce a current rent roll of about £330,000 a year, and which will have an estimated rental value of approximately £600,000 a year by 1988.

* * *

Relyon Group has acquired 51 per cent of **Photo-Scan** for £286,513 cash to be satisfied from Relyon's own resources.

Photo-Scan, based at Sunbury-on-Thames, is a specialist producer and supplier of closed-circuit television surveillance equipment for use in retail and industrial environments, and in addition offers complete integrated security systems.

* * *

H. Samuel has received acceptances in respect of 7,056,502 ordinary and 9,795,541 non-voting ordinary in **James Walker Goldsmith and Silversmith.**

Prior to the announcement of the recommended offers, Samuel owned 842,250 ordinary and 150,490 non-voting ordinary shares in Walker. Since then Samuel has acquired 281,000 ordinary and 615,000 non-voting ordinary in Walker. In addition, N. M. Rothschild and Sons, acting in concert with Samuel, has acquired 1,295,000 ordinary which, together with shares acquired by a subsidiary of Samuel, are included in the acceptance figures.

H. Samuel now owns, or has received acceptances in respect of 8,093,752 ordinary (90.6 per cent) and 10,126,031 non-voting ordinary (89.4 per cent). The offers have now been declared unconditional in all respects and they remain open for acceptance until further notice. The share alternative has now closed.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interim: British Assets Trust.

Finals: Ellis and Goldstein, Ex-Lands, Fleming Universal Investment Trust, Gold and Base Metal Mines, Marshall's Universal, H. C. Slingsby, Spear and Jackson International, Travis and Arnold, Wingate Property Investments.

FUTURE DATES

Interims:

Atlanta Investment Trust	Apr 30
Barton Transport	May 3
Cooper (Frederick)	May 8
Dubilier	May 2
Lyles (S.)	May 3
North Sea Assets	Apr 27
Pearce (C. H.)	May 1
Simpson (S.)	May 3
Tiger Oats & National Milling	May 2
Transvaal Consd Land & Explr	May 4
W'hampton & Dudley Brew.	May 24

Finals:

Acsis Jewellery	May 2
Bilton (Percy)	May 4
Bremner	Apr 27
Clayton, Son	Apr 27
Dataserv	May 10
Folkes (John) Hefo	May 2
Hammerson Prop Inv & Dev	Apr 30
Lee Cooper	May 8
Lilleshall	May 4
MacLellan (P. & W.)	Apr 30
Marks and Spencer	May 1
Milletts Leisure Shops	May 3
Petrocon	May 2
Scott and Robertson	May 3
Sumner (Francis)	May 1
United Friendly Insurance	Apr 30
Walker (J. O.)	May 2

London & Liverpool makes two disposals

London and Liverpool Trust (LLT), the backer of the ill-fated Tele-Jector project to put big-screen television sets into pubs and clubs, has sold two of its other businesses as part of its restructuring programme.

LLT has sold James B. Russell its U-Bix photocopier distribution business for up to £1.25m and Mr Russell has resigned from the LLT board.

Photocopier distribution is seen by LLT as one of its core businesses but it said the two Russell companies which have been sold were not a necessary part of its longer term strategy.

Ygred, a newly-formed private company has paid £1m in cash for the Russell assets plus another £250,000 depending on the level of debtors' items.

The sale price is about the same as the book value of the assets involved. It has been used to reduce bank overdrafts and other debts of LLT.

LLT has also sold Hiatt Hardware, a distributor of fastenings and other hardware products, for £91,000 cash.

Hiatt has been sold to Mr A. Yelland, a director of Copy Consultants (Western), an LLT subsidiary, until his resignation last May.

LLT's shares fell 1p yesterday to 15p.

GRA Group

GRA Group, the greyhound race track operator, has further reduced the size of its holding in Southend Stadium following Yelverton Investment's recent purchase of a large minority stake.

GRA announced yesterday that it had sold another 50,000 shares to reduce its holding to 29.46 per cent. It had previously held nearly 36 per cent of Southend for more than 15 years.

Yelverton, which has Mr John Bentley on its board and includes Mr Jim Slater among its shareholders, agreed earlier this month to buy a 27 per cent stake in Southend from Mr P. R. Cammidge, the chairman, and from the trustees of Mr R. Deutsch.

Yelverton at the same time arranged for the placement of a further 15.8 per cent of Mr Cammidge's holding with private clients of stockbrokers Northcote and S. P. Angel.

Mr Tony Kerry, company secretary of GRA, said: "After the change in control of the company we decided to realise a few shares. We are relatively passive in the market and are selling as and when the occasion arises."

A year ago it sold the White City Stadium for £12m to a company called Stock Conversion and Investment.

Southend's shares fell 4p to 49p yesterday while GRA was unchanged at 66p.

MINING NEWS

Amax in profit after two years

BY KENNETH MARSTON, MINING EDITOR

AMERICA'S **Amax** diversified natural resources group has returned to profitability in the first quarter of this year—but only just. Net earnings for the period amount to $8.2m (£5.8m), or 4 cents per share, and include an extraordinary $7.7m credit for an income tax operating loss carried forward. Also included is a $4m gain on the sale of coal properties to Petrofina.

Even so, it would be churlish to minimise the progress which the company has made, the latest quarter profit having followed on the heels of a worse-ever loss of $366.9m (including $309m write-downs) in the final quarter of 1983 when there was a total loss for the year of $489m. The latest net profit is also the first for Amax since the end of 1981.

Mr Pierre Gousseland, the chairman, says: "The long-awaited turnaround in profitability results from strong markets for aluminium, improved prices and demand for other metals and steady profits from our energy business."

He adds that earnings from operations in the first quarter totalled $73.1m, more than for the whole of 1983. Furthermore, Amax has repaid approximately $200m in outstanding debt since the beginning of this year.

Sales in the latest quarter amounted to $646m compared with $631m in the previous three months. The main changes in operating results as compared with the final quarter of last year were a move to a profit of $12m from a loss of $19m in base and precious metals and an increase in profits at the energy division to $52m from $36m.

Aluminium contributed $28m against $30m while losses on molybdenum, nickel, tungsten and speciality metals fell to $14m from $26m. Corporate expenses were lower at $14m against $22m.

Shares of Amax were unchanged in London at $17⅞ yesterday.

Lac Minerals to spend C$250m at Hemlo

CANADA'S **Lac Minerals** has made a definite decision to go ahead with the development of its big Williams orebody in the country's newest gold camp at Hemlo in north-western Ontario. Following the completion of a feasibility study, Lac estimates the capital cost of building its mine and treatment plant at C$250m (£138m).

Ground clearing work for the initial open-pit phase has already begun, and construction of the shaft collar for the later underground operation should start by the end of this month.

Mr Peter Allen, Lac chairman, expects production to start in mid-1986 at a rate of 3,000 tonnes of ore a day, rising eventually to 6,000 tonnes. At the reported average grade of 0.17 ozs of gold per tonne, this should yield something like 180,000 ozs of gold a year at the proposed starting rate.

The company has 43.3m tonnes of ore in the Williams deposit, according to the latest annual report, but exploration drilling is still continuing. New reserve and grade figures should be available by the end of June.

Lac has also announced some encouraging figures for the three months to the end of March, showing net profits of C$9.29m or 37 cents per share, up from C$6.3m or 25 cents in the first quarter of last year.

MINING NEWS IN BRIEF

Falconbridge, Canada's No 2 in the nickel business, has already returned to profitability with earnings of C$12.1m (£6.66m) in the final three months of last year, the first quarterly profit since the third quarter of 1981.

It now announces earnings of C$8.95m, or C$1.25 per share, for the first quarter of this year. Mr William James, the chairman, says that this reflects "efficiencies and savings throughout the organisation" and stresses that Falconbridge intends to remain a low cost producer of nickel.

* * *

Mr Charles F. Baird, chairman of **Inco**, said at the Toronto meeting that the company's break-even price for nickel was less than U.S.$2.50 per pound, depending on the prices realised for the by-product copper, precious metals and cobalt and the performance of the company's alloy products group.

In November, he said that the break-even was closer to $2.20 than $3. Nickel is currently around $2.25. Mr Baird also said that Inco should return to profitability in the third quarter of this year.

SECTION III – INTERNATIONAL MARKETS

FINANCIAL TIMES

Wednesday April 25 1984

Indonesia cancels Eurobond as prices drift, Page 40

WALL STREET

Economic data aid equilibrium

THE FLOW of statistics on the progress of the U.S. economy continued to capture all attention on Wall Street financial markets yesterday, *writes Terry Byland in New York.*

The latest details on consumer prices and durable goods orders appeared favourable and did something to offset the disclosure of a record rise in consumer credit in March. But the credit markets remained cautious ahead of the U.S. Treasury's announcement of the size of the budget deficit for last month, due late in the trading session.

Mr Martin Feldstein, chief economic adviser to President Ronald Reagan, described the gain of only 0.2 per cent in the consumer price index for March as an indication that the economy was not overheating. The gain was much smaller than most market predictions, as was the 0.8 per cent upturn in durable goods orders.

But the bond market, unwilling to move ahead of the Treasury statement on the budget, remained sluggish. Retail interest was still very thin, and traders – who suffered further losses last week after three months of persistent setbacks – kept their positions trimmed.

Once again the stock market opened optimistically but could make little or no headway while the bond market remained nervous. The early morning round of gains, which has become an almost traditional indication of the market's underlying hopefulness, was whittled away before beginning afresh.

By 3.30 pm, the Dow Jones industrial average was 11.83 up at 1,161.33.

Corporate trading reports helped buoy the confidence of the stock market. The persistently modest level of turnover indicates a substantial weight of institutional cash in the background, waiting for a clearer view of the outlook for interest rates. But stocks are unlikely to break out of their recent trading range unless the bond market can hold steady.

The closing report on Wall Street and updated U.S. market monitors were not available because of industrial action at the Financial Times' printers in Frankfurt.

Among the leaders, IBM edged up $¼ to $109⅛, with Exxon at $41 and General Electric at $54 showing similar gains. International Telephone and Telegraph at $36¼ recovered $⅝ of the loss which followed last week's announcement of poor results.

But there was little improvement over the broader range of the market. Both Nasdaq and the American Stock Exchange indices recorded minor losses at midsession.

The latest round of sales figures from the motor industry brought no buyers for the stocks concerned. Ford at $33⅞ shed $¾ and General Motors $¼ to $64⅞.

Recent firmness in technology issues brought some profit-taking which left Texas Instruments $1 off at $137¾ and Teledyne a further $1⅝ down at $153⅜.

AT&T remained unchanged at $15⅛ but the regional Bell companies held firm in the wake of their respective results. Southwestern Bell put on $1 to $57⅞.

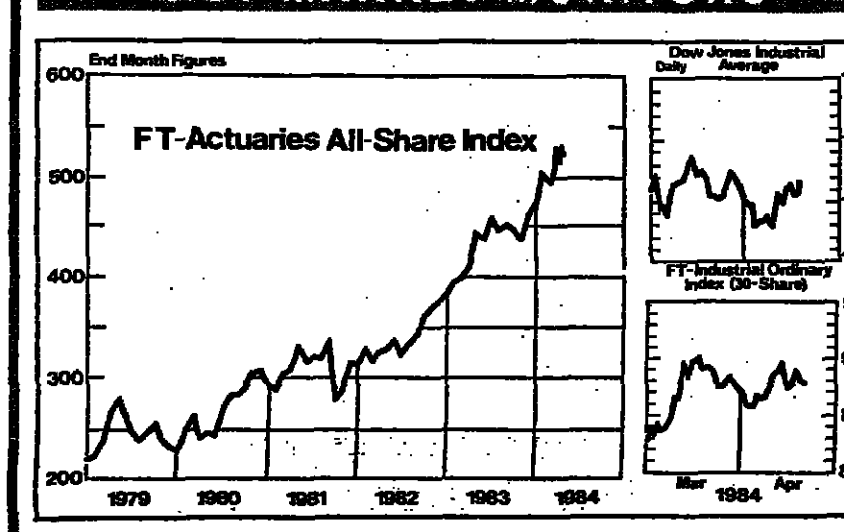
Coopervision, manufacturer of eye care products, slipped $⅝ to $22, against the $25 offered by Nestlé of Switzerland. Carter Hawley Hale at $27⅞ gained ⅜ in heavy trading as the market awaited the outcome of the bid situation. Among the speculative oil issues, Mesa Petroleum jumped $⅝ to $17⅞.

A further dip in the federal funds rate to 9¼ per cent helped the credit markets, and bond prices edged higher at midsession. Turnover remained thin, however. The key long bond put on 5/32 to 93 29/32 and smaller gains were spread throughout the range.

But rates in the Treasury bill market stayed high, with the three-month bill three basis points up at 9.65 per cent and the six-month rate five basis points up at 9.77 per cent.

A sizeable calendar of municipal issues for this week got off to a favourable start with the pricing of $226m revenue bonds of New York Municipal Assistance to yield 8.50 per cent in 1993 and 10 per cent in 2008. A $10m mortgage bond from Niagara Mohawk was priced at 205 basis points above the Treasury seven-year note rate after the maturity was shortened from 10 to seven years.

KEY MARKET MONITORS



STOCK MARKET INDICES

	April 24	Previous	Year ago
NEW YORK			
DJ Industrials	1161.33*	1158.08	1196.30
DJ Transport	496.60*	500.82	527.24
DJ Utilities	125.63*	126.69	127.17
S&P Composite	156.85*	158.02	160.42
LONDON			
FT Ind Ord	876.2	880.0	695.2
FT-SE 100	1105.4	1108.4	941.1
FT-A All-share	522.44	526.47	439.54
FT-A 500	567.90	572.22	478.27
FT Gold mines	686.1	683.2	644.3
FT-A Long gilt	10.31	10.31	10.49
TOKYO			
Nikkei-Dow	10,761.82	10,800.78	8563.12
Tokyo SE	845.38	848.51	622.02
AUSTRALIA			
All Ord.	759.1	759.3	597.4
Metals & Mins.	542.0	540.7	547.8
AUSTRIA			
Credit Aktien	54.96	54.96	54.42
BELGIUM			
Belgian SE	154.89	154.9	121.83
CANADA			
Toronto			
Composite	2317.5*	2327.0	2328.80
Montreal			
Industrials	416.58*	418.14	396.24
Combined	394.40*	395.98	389.32
DENMARK			
Copenhagen SE	n/a	192.67	139.03
FRANCE			
CAC Gen	173.4	173.0	119.6
Ind. Tendance	110.3	109.8	74.7
WEST GERMANY			
FAZ-Aktien	349.27	359.58	316.25
Commerzbank	1021.8	1022.7	948.0
HONG KONG			
Hang Seng	1070.02	1115.85	1006.53
ITALY			
Banca Comm.	216.78	216.48	190.27
NETHERLANDS			
ANP-CBS Gen	157.8	159.0	125.9
ANP-CBS Ind	125.7	126.9	105.3
NORWAY			
Oslo SE	280.59	281.47	170.9
SINGAPORE			
Straits Times	993.27	995.23	917.91
SOUTH AFRICA			
Golds	n/a	1033.7	903.3
Industrials	n/a	1058.8	940.5
SPAIN			
Madrid SE	114.68	115.49	110.9
SWEDEN			
J & P	1523.15	1527.5	1395.67
SWITZERLAND			
Swiss Bank Ind	371.6	372.3	319.3
WORLD	April 19	Prev	Year ago
Capital Int'l	187.3	187.7	172.9

GOLD (per ounce)

	April 24	Prev
London	$383.75	$385.00
Frankfurt	$383.25	$385.00
Zurich	$383.50	$385.00
Paris (fixing)	$383.71	$384.26
Luxembourg (fixing)	$385.00	$385.00
New York (April)	$384.50*	$386.40

* Latest available figure

CURRENCIES

(London)	U.S. DOLLAR April 24	U.S. DOLLAR Previous	STERLING April 24	STERLING Previous
$	–	–	1.409	1.4185
DM	2.6795	2.657	3.7775	3.77
Yen	225.45	224.75	318.0	319.0
FFr	8.239	8.165	11.6075	11.58
SwFr	2.2165	2.195	3.125	3.115
Guilder	3.024	2.997	4.2625	4.2525
Lira	1658.5	1641.0	2336.5	2326.5
BFr	54.74	54.17	77.15	76.85
C$	1.28105	1.28045	1.8045	1.8175

INTEREST RATES

Euro-currencies	April 24	Prev
(3-month offered rate)		
£	8⅝	8 9/16
SwFr	3⅝	3 13/16
DM	5 11/16	5⅝
FFr	13⅛	13⅛
FT London Interbank fixing		
(offered rate)		
3-month U.S.$	11 1/16	11 1/16
6-month U.S.$	11 5/16	11¼
U.S. Fed Funds	9⅝*	9⅝
U.S. 3-month CDs	10.65*	10.60
U.S. 3-month T-bills	9.65*	9.64

U.S. BONDS

Treasury	April 24* Price	April 24* Yield	Prev Price	Prev Yield
11⅞ 1986	99[illegible]	11.89	99[illegible]	11.69
12⅜ 1991	98[illegible]	12.67	98[illegible]	12.67
11.75 1993	94[illegible]	12.77	94[illegible]	12.77
12 2013	93[illegible]	12.80	93[illegible]	12.80
Corporate	April 24* Price	Yield	Prev Price	Yield
AT & T				
10⅜ June 1990	90⅝	12.75	90⅝	12.75
3⅜ July 1990	70⅝	10.40	70⅝	10.40
8⅝ May 2000	69⅝	13.35	69⅝	13.35
Xerox				
10⅞ March 1993	86⅝	13.15	86⅞	13.15
Diamond Shamrock				
10⅜ May 1993	86⅜	13.25	86⅜	13.25
Federated Dept Stores				
10⅜ May 2013	79⅜	13.40	79⅜	13.40
Abbot Lab				
11.80 Feb 2013	88⅜	13.35	88⅜	13.35
Alcoa				
12½ Dec 2012	89⅜	13.75	89⅜	13.75

FINANCIAL FUTURES

CHICAGO	Latest	High	Low	Prev
U.S. Treasury Bonds (CBT)				
8% 32nds of 100%				
June	64-28	65-01	64-21	64-29
U.S. Treasury Bills (IMM)				
$1m points of 100%				
June	90.09	90.11	90.06	90.06
Certificates of Deposit (IMM)				
$1m points of 100%				
June	88.99	89.02	88.97	88.97
LONDON				
Three-month Eurodollar				
$1m points of 100%				
June	88.85	88.90	88.84	88.85
20-year Notional Gilt				
£50,000 32nds of 100%				
June	106-25	107-00	106-14	106-17

COMMODITIES

(London)	April 24	Prev
Silver (spot fixing)	680.65p	656.45p
Copper (cash)	£1084.50	£1101.25
Coffee (May)	£2079.50	£2094.00
Oil (spot Arabian light)	$28.37	$28.40

LONDON

Pit worries restrict a revival

CONCERN over the mineworkers' strike and weakness on Wall Street during the previous day's trading combined to restrict interest in London. The FT Industrial Ordinary index closed down 3.8 at 876.2.

After a tentative opening, activity increased during the afternoon session, leaving both equities and government stocks above their low points for the day at the close. Gilts were, however, the recipients of most of this late support after appearing during the morning to continue their eight-day decline.

Sterling's fall against the dollar failed to deter buyers and the upward movement continued, leaving many longs up ½ on balance. Shorts failed to show similar resilience and settled fractionally softer.

Chief price changes, Page 32; Details, Page 33; Share information service, Pages 34-35

HONG KONG

A PARTIAL recovery was already under way by the Hong Kong close after initial selling followed Friday's details of the planned British handover. With volume quiet, much of the sales were attributed to individuals as a lack of buyers forced prices downward, the institutions merely holding back.

Jardine Matheson, which precipitated the market's last big slide with its reincorporation plans, fell 50 cents to HK$11.30. That news had set off a two-day retreat which hacked more than 100 points off the Hang Seng index, against yesterday's 45.83 fall at 1,070.02.

SINGAPORE

CAUTION was the overriding Singapore sentiment as prices drifted lower in light trading. Losses outnumbered gains two to one and the Straits Times industrial index lost 1.96 to 993.27.

The property groups were weaker, with Selangor Properties down 17 cents to S$4.88 and City Development 7 cents off at S$1.65. Banks were also easier, led by Malayan Banking which closed 30 cents lower at S$10, following news of a bonus, rights and convertible unsecured note issue.

AUSTRALIA

TRADERS were slow to return in Sydney, restraining activity in all sectors. Continued disappointment with poor results from the Eclipse One well in the Timor Sea was reflected in a further 20-cent fall to A$11.35 by market leader BHP.

Oils were generally weaker with Weeks Australia down 7 cents to A$1.63 and Consolidated Petroleum 14 cents lower at 78 cents.

The All Ordinaries index finished 0.2 lower at 759.1, while the industrials index was up 1.8 to 995.2.

SOUTH AFRICA

GOLD issues improved gradually in Johannesburg, although a few eased from their peaks near the close. Leading the advances, President Steyn advanced R2 to R73 while Modderfontein rose 25 cents to R7.85.

CANADA

GOLDS led Toronto downward, with weakness spreading to base metal and mineral issues, but the oil and gas sector showed somewhat more resilience.

Banks were Montreal's weak spot, although industrials also fared badly. Utilities withstood much of the retreat.

TOKYO

Yet more ground gives way

MORE GROUND was lost in the Tokyo stock market yesterday, with some incentive-backed issues and regional banks providing the only spark of life in otherwise dull trading, *writes Shigeo Nishiwaki of Jiji Press.*

An overnight drop on Wall Street after the Easter holiday combined with small-lot selling by non-residents and an increased buying balance on margin transactions to drive investors to the sidelines.

The Nikkei-Dow market average of 225 select issues slipped 38.96 to 10,761.82, the same level as in late March. Turnover was modest at 271.67m shares, although up from the previous day's 202.96m. Declines far outnumbered advances 424 to 293, with 159 issues unchanged.

International populars remained lacklustre, reflecting light foreign selling: TDK shed Y190 at one point after a sharp fall in videotape prices, but rebounded later to end Y90 down at Y5,740. The electronics giant Hitachi lost Y9 to Y936 and Fuji Photo Film Y60 to Y1,680.

The bearish tone of leading issues spread to other populars, with Matsushita Electric Industrial dropping Y20 to Y1,860, Fujitsu Y10 to Y1,280 and Kyocera Y110 to Y5,890.

Highly capitalised steels and heavy electricals eased, as did chemical, oil and non-ferrous metal stocks.

Of the incentive-supported issues to attract buyers, Tokuyama Soda climbed Y30 to Y565, after a report that the company had developed the world's first translucent nitride ceramic using aluminium nitride. It was volume leader on 10m shares.

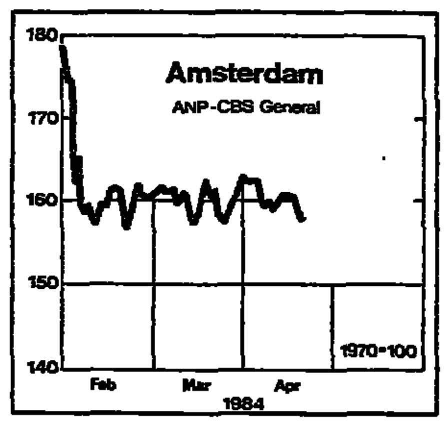
Takara Shuzo gained Y23 to Y800 on expectations of a strong business performance, while Aoki Construction firmed Y33 to Y838 on revived investor interest over its gold discovery in Brazil.

Regional banks remained firm, with Gunma Bank posting a maximum allowable daily rise of Y80 to Y465 and the Bank of Yokohama surging Y42 to Y520.

After the close, the Tokyo Stock Exchange announced that the buying balance on margin transactions on the Tokyo, Osaka and Nagoya stock exchanges at the end of last week had swollen Y26.7bn over the previous week to a record Y2,722.9bn. The margin selling balance decreased Y68.9bn to Y351.9bn.

Bond trading was extremely thin, with banks and securities companies concentrating on an auction of Y700bn worth of 5.9 per cent two-year government bonds. The issue amount was the largest on record.

Although prices moved little in the over-the-counter market, the yield on the benchmark 7.5 per cent government bonds maturing in January 1993 rose slightly to 7.125 per cent from Monday's 7.110 per cent.



EUROPE

Movements remain on modest side

A RELUCTANCE among European bourse investors to embark on any concerted campaign – either on the buying or selling side – was reflected yesterday both in the modest extent of adjustments to most leading prices and in the low turnover in which these were effected.

Factors making for restraint were a firmer dollar and the poor overnight finish in New York, but this was offset in some centres by a softening in domestic interest rates and a continuing trickle of healthy corporate results.

An additional disincentive for **Frankfurt**, though, was the meeting set for today of IG Metall union leaders to map out a strike strategy in pursuit of the nationwide 35-hour week claim.

Engineering issues showed KHD off DM 2 at DM 245, steelmaker Hoesch dipped DM 1 to DM 113.50 and VW in cars was DM 2 lower at DM 198. But the respective sectors also had MAN steady at DM 148, Klöckner 10 pfg firmer at DM 63 and Daimler-Benz up DM 1.50 to DM 558.

Porsche, awaiting its debut, was quoted at a when-issued DM 1,120 against an offer price of DM 780.

Banks fared poorly but electricals were firm.

Public sector bonds slid as much as 40 basis points, requiring the Bundesbank to buy DM 37.5m in paper after sales last Thursday of DM 9.4m worth.

Dull **Amsterdam** dealings, taking the ANP-CBS general index 1.2 lower at 157.8, showed insurer Aegon Fl 5.20 off at Fl 125.30 on results, and Akzo in chemicals down Fl 2.90 to Fl 94 ahead of its move ex-dividend today.

Publisher Elsevier emerged firm at Fl 86.50 ex its five-for-one stock split as well as a dividend of Fl 10 cash and one further new share for each old one held. The previous close was Fl 515.

Domestic bonds were barely changed.

The day's strongest performance came from **Copenhagen**, founded on expectations of a parliamentary accord paving the way toward lower interest rates. Banks fared the best, with Privatbanken jumping DKr 28 to DKr 304.

Ahead of further budget measures due today, **Stockholm** was subdued and weak. A SKr 2 lower finish was registered by Alfa-Laval at SKr 281, Cardo at SKr 423 and Ericsson at SKr 330.

A half-point dip in **Paris** call money brought a firm but mixed tone. Responding to results, Beghin-Say shed FFr 10.50 to FFr 270.50 and Elf-Aquitaine FFr 2 to FFr 253 but Pernod Ricard put on FFr 5 to FFr 760 and Dumez FFr 4 to FFr 728.

Steels led **Brussels** higher, with Cockerill Sambre BFr 16 ahead at BFr 319. **Zurich** weakened, with the exception of the foods sector where Nestlé gained SwFr 40 to SwFr 5,200. Bonds drifted.

Milan gains outnumbered losses, but movements were narrow. Generale Immobiliare in properties added L31 to L849 on above average demand. Electricals led **Madrid** lower.

Prices at 3pm, April 24

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
20⅝	11½	AAR	.44	2.3	20	202	19⅝	19½	19½	
52⅝	31½	ACF	1.40	2.7	653	97	52¼	52¼	52¼	
22	15½	AMCA	n 1	6.0		4	16¼	16¼	16¼	−¼
18⅞	13⅛	AMF	.50	3.5		235	14¼	13⅞	14⅛	+⅛
41⅞	26	AMR Cp			7	2021	33⅞	32¾	33⅛	+⅝
20⅝	17½	AMR	pf2.18	11.		49	19⅝	18⅞	19⅝	+⅛
41½	29⅝	AMR	pf2.13	6.0		43	35½	34⅞	35½	+⅝
16⅝	6⅛	APL			3	15	10⅝	10⅜	10⅜	
55¾	40⅝	ARA	2.10	5.1	9	23	41½	41	41⅛	+⅜
77⅞	50¼	ASA	3a	4.6		332	65⅝	65⅛	65⅜	−⅛
33⅛	17	AVX	s .32	1.6	15	1282	19⅞	19½	19⅝	+⅛
53⅛	38¾	AbtLab	1.20	2.8	15	1085	43½	43	43¼	−¼
30⅞	23⅞	AccoWd	.60	2.3	17	24	25⅞	25½	25⅞	+⅛
27½	19⅝	AcmeC	.40	1.9		65	20⅝	20½	20⅝	+⅛
13	8⅞	AcmeE	.32b	3.2	62	25	9⅞	9¾	9⅞	
24⅝	12⅝	AdmDg	.04	.3	8	1	14⅝	14⅝	14⅝	
18⅜	15⅛	AdaEx	2.11e	13.		97	15¾	15½	15¾	+⅛
19⅜	11	AdmMl	.28	1.8	8	26	16⅛	15¾	16	+½
22	14½	AdvSys	.811	4.9	16	6	16⅝	16¼	16⅝	
18⅝	8⅞	Advest	.12	1.2	13	109	10	9½	10	+⅛
37½	17⅝	AMD	s		26	4162	32⅜	31⅝	32¼	
24⅝	12½	Aerflx	s		12	52	12⅝	d12	12	−½
43½	33⅞	AetnLf	2.64	7.2	11	983	36⅝	36¼	36⅝	+⅜
59⅛	54⅝	AetL	pf5.28e	9.3		113	57⅛	56⅞	56⅞	−⅛
40½	20	Ahmns	1.20	5.6	5	1371	21½	20⅞	21½	+⅛
7⅛	3⅜	Aileen				18	3⅜	3⅜	3⅜	
51	38½	AirPrd	1	2.1	11	423	46⅞	46	46¾	+⅝
30⅞	16	AirbFrt	.60	3.5	11	225	17	17	17	−⅛
3⅛	1⅛	AlMoa	s			16	3⅛	3⅛	3⅛	
33½	28¼	AlaP	pfA3.92	14.		8	29	28¾	29	+⅛
7⅞	6½	AlaP	dpf.87	13.		16	6⅞	6¾	6¾	−⅛
81½	67½	AlaP	pf9.44	14.		z70	69	69	69	
71	57⅞	AlaP	pf8.16	14.		z50	58½	58½	58½	−½

Continued on Page 31

AMERICAN STOCK EXCHANGE COMPOSITE PRICES

Prices at 3pm, April 24

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										

Continued on Page 32

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

Continued from Page 30

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										
25⅞	13¼	WyleLb	.32	2.1	14	71	15½	15	15½	+ ⅛
17⅜	9	Wyly			15		10½	10⅜	10⅜	− ⅛
22½	15⅞	Wynns	.60	3.4	10	56	18½	17⅝	17⅞	− ⅛

X—Y—Z

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
52⅞	39	Xerox	3	7.6	9	1986	39½	d38¼	39½	
37	21½	XTRA		2.7	12	12	24½	24½	24½	+ ⅛
34	24	ZaleCp	1.26	5.0	10	7	25	24⅝	25	
24	15⅞	Zapata	.84	3.5	12	2481	23½	22½	23½	+ ⅝
52¼	31⅛	Zayre	s .40b	1.2	10	126	34¼	33⅛	34½	− ½
38⅝	16⅝	ZenithR			13	1097	30½	29½	29½	− ⅝
27⅝	19½	Zero	s .36	1.9	18	26	20⅞	20⅝	20⅞	
37⅞	21½	Zurnin	1.32	5.4	11	40	24½	24½	24½	− ⅛

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a—dividend also extra(s). b—annual rate of dividend plus stock dividend. c—liquidating dividend. cld—called. d—new yearly low. e—dividend declared or paid in preceding 12 months. g—dividend in Canadian funds, subject to 15% non-residence tax. i—dividend declared after split-up or stock dividend. j—dividend paid this year, omitted, deferred, or no action taken at latest dividend meeting. k—dividend declared or paid this year, an accumulative issue with dividends in arrears. n—new issue in the past 52 weeks. The high-low range begins with the start of trading. nd—next day delivery. P/E—price-earnings ratio. r—dividend declared or paid in preceding 12 months, plus stock dividend. s—stock split. Dividends begins with date of split. sls—sales. t—dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. u—new yearly high. v—trading halted. vi—in bankruptcy or receivership or being reorganised under the Bankruptcy Act, or securities assumed by such companies. wd—when distributed. wi—when issued. ww—with warrants. x—ex-dividend or ex-rights. xdis—ex-distribution. xw—without warrants. y—ex-dividend and sales in full. yld—yield. z—sales in full.

WORLD STOCK MARKETS

AUSTRIA

April. 24	Price Sch%	+ or —
...reditanstalt	211	—1
...esser	328	+3
...terunfall	409	...
...aenderbank	305	
...erlmooser	354	...
...teyr Dimlera	149	...
...eitscher Mag	218	+2

BELGIUM/LUXEMBOURG

April 24	Price Frs.	+ or —
ARBED	1,810	+35
Banq Int A Lux	5,200	
Bekaert B	3,850	—50
Ciment CBR	2,360	+10
Cockerill	319	+16
Delhaize	4,800	—100
EBES	2,765	—25
Electrobel	6,720	—20
Fabrique Nat	2,220	—50
GB Inno BM	3,310	—20
GBL (Brux)	2,385	+35
Gevaert	3,300	
Hoboken	5,440	+40
Intercom	3,080	+20
Kredietbank	7,119	+10
Pan Hldgs.	9,670	—150
Petrofina	7,950	+10
Royale Belge	9,200	+250
Soc. Gen. Banq	3,500	+20
Soc. Gen. Belge	1,880	+20
Sofina	6,010	+50
Solvay	4,110	+10
Traction el	3,645	+40
UCB	5,350	—40
Vieille Mont	4,270	+110

DENMARK

Apr. 24	Price Knr %	+ or —
Aarhus Olie	380	...
Andelsbanken	265	+16
Baltic Skand	605	...
CopHandelsbank	267	+13
D. Sukkerfab	655	+10
Danske Bank	261	+16
East Asiatic	176	...
Forenede Brygg.	965	...
Forenede Damp.	165	+5
GNT Hldg.	520	+10
I.S.S.B.	620	
Jyske Bank	489	...
Novo Ind	2,455	...
Privatbanken	304	—28
Provinsbanken	350	+15
Smidth (F.)	230	—7
Sophus Berend.	1,180	+35
Superfos	520	

FRANCE

April 24	Price Frs.	+ or —
Emprunt 4½% 1973	1,831	—14
Emprunt 7% 1973	9,630	+20
CNE 3%	3,458	—31
Air Liquide	563	—1
BIC	439	+3
Bouygues	720	+7
BSN Gervais	2,627	+27
CIT-Alcatel	1,509	+13
Carrefour	1,800	...
Club Mediter'n	914	—11
CFAO	675	—10
Cie Bancaire	486	+17
Cofimeg	225.5	—6
Creusot Loire	37.2	—1.8
Darty	955	+18
Dumez S.A.	728	+4
Eaux (Cie Gen)	550	—5
Elf-Aquitaine	253	—2
Gen. Occidentale	592	—3
Imetal	84	—1.8
Lafarge Coppee	393.5	+2.7
L'Oreal	2,395	+17
Legrand	1,865	+5
Maisons Phenix	245	—5
Matra S.A	1,512	+47
Michelin B	807	—15
Midi (Cie)	1,456	—24
Moet-Hennessy	1,513	+3
Moulinex	106.9	+1.4
Nord Est	50.5	+0.6
Pernod Ricard	760	+5
Perrier	564	+5
Petroles Fra	250	—2
Peugeot S.A	233	+1
Poclain	45.8	—0.4
Printemps Au	158.2	+5.2
Radiotech	312	+12
Redoute	1,215	+15
Roussel-Uclaf	1,110	+67
Schneider S.A.	106.5	+2.5
Sefimeg	268	
Skis Rossignol	1,385	+15
Telemech Elect.	1,660	—10
Thompson (CSF)	316	+9.5
Valeo	272	—3.5

GERMANY

Apr. 24	Price Dm.	+ or —
AEG-Telef	94.5	—0.4
Allianz Vers	758	—5
BASF	162.5	—0.2
Bayer	169.1	—0.9
Bayer-Hypo	294	—0.5
Bayer-Verein	346	—1.5
BHF-Bank	282	—2
BMW	392.1	—1.9
Brown Boveri	221	...
Commerzbank	177.2	—2.9
Cont'l. Gummi.	130.8	+0.4
Daimler-Benz	558	+1.5
Degussa	405xd	+2
Demag	146	...
D'sche Babcoc	160	—2.5
Deutsche Bank	387.5	—1
Dresdner Bankk.	177	...
GHH	148	—1
Hochtief	512	—4
Hoechst	178	—0.8
Hoesch Werke	113.5	—1
Holzmann (P)	425	...
Horten	194.5	—0.5
Kali und Salz	196	+1
Karstadt	264.5	—0.3
Kaufhof	247.5	—1.5
KHD	245	—2
Kloeckner	63	+0.1
Krupp	80.5	+1.5
Linde	378	...
Lufthansa	157.5	+0.5
MAN	148	...
Mannesmann	142.2	—0.5
Mercedes Hld	487	—3
Metallgesell	247	+2
Muench Rueck	1,090	+15
Preussag	274.5	—2.5
Rhein West Elect	163.5	—0.5
Rosenthal	230	+1
Schering	349	—3.5
Siemens	398	+1
Thyssen	84	—0.2
Varta	169.7	+1.2
Veba	169.7	—0.3
V.E.W	120.5	—0.5
Verein-West.	300	+1
Volkswagen	198	—2

ITALY

Apr. 24	Price Lire	+ or —
Banca Com'le	34,500	+490
Bastogi-IRBS	150.5	—0.4
Centrale	1,845	—3
Credito Varesino	5,395	—5
Fiat	4,250	+6
Finsider	37	...
Generali Assicur	37,150	—50
Invest	3,398	+16
Italcementi	48,800	+80
Montedison	217.4	—0.2
Olivetti	4,615	+10
Pirelli Co	2,995	+10
Pirelli Spa	1,540	+15
Snia BPD	1,648	+17
Toro Assic.	12,195	+95
do. Pref.	8,430	+31

NETHERLANDS

April 24	Price Fls	+ or —
ACF Holding	181	—2
AEGON	125.3	—5.2
Ahold	189.7	—1.8
AKZO	94	—2.9
ABN	273	—7
AMEV	154	—1
AMRO	69.3	—1.2
Bredero Cert	200.5	—0.5
Bos Kalis Westm.	29.5	—1
Buehrmann-Tet.	66.5	—0.6
Calland Hldgs.	36.4	—0.4
Credit Lyon'is Bk	57	—0.3
Elsevier NDU	86.5	+0.5
Gist. Brocades	129.5	—3
Heineken	127	—1
Hoogovens	47	—0.7
Hunter Douglas	27	—0.1
Int Mueller	33.6	...
KLM	173.5	—0.5
Naarden	39	...
Nat Ned Cert	216	—1
Ned. Credit Bank	40	...
Ned Mid Bank	147	—4.0
Nedlloyd	117.8	—1.7
Oce Grinten	235	—2
Ommeren Van.	28.9	—0.6
Pakhoed	61	—0.1
Philips	48	—0.2
Rijn-Schelde	3.8	—0.2
Robeco	321.5	—1
Rodamco	134.7	+0.2
Rolinco	314	—1.5
Rorento	203.1	—0.1
Royal Dutch	155.3	+0.2
Unilever	252.7	—1.5
VMF Stork	109	—2
VNU	151.5	...
West UtBank	92.5	—0.4

NOTES — Prices on this page are as quoted on the individual exchanges and are last traded prices. § Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights xa Ex all.

NORWAY

April.24	Price Kroner	+ or —
Bergen Bank	164	+3
Borregaard	329	+3
Christiania Bk.	168	+3
Den Norsk Credit	171.0	—1
Elkem	173	—0.5
Norsk Data	306	—9
Norsk Hydro	610	—7.5
Storebrand	230	—1

SPAIN

April. 24	Price Pta%	+ or —
Bco Bilbao	396	+3
Bco Central	318	—1
Bco Exterior	201	...
Bco Hispano	235	—1
Bco Santander	297	+7
Bco Vizcaya	366	—3
Dragados	144	—1
Hidrola	47	—0.5
Iberduero	63	—1.5
Petroleos	112.5	
Telefonica	81.2	

SWEDEN

April 24	Price Kronor	+ or —
AGA	372	+1½
Alfa-Laval	281	—2
ASEA (Free)	350	
Astra (Free)	515	+3
Atlas Copco	134	+4
Boliden	455	+5
Cardo (Free)	425	—2
Cellulosa	160	—2
Electrolux B	270	...
Ericsson	330	—2
Esselte	350	—1
Mo Och Domsjo	540	...
Pharmacia	283	+3
Saab-Scania	407	+7
Sandvik	400	...
Skandia	391	—1
Skan Enskilda	346	—1
SKF	221	+1
St. Kopparbergs.	765	—5
Sven Handelsbn.	199	—1
Swedish Match	259	+1
Volvo B (Free)	466	—1

SWITZERLAND

April 24	Price Frs.	+ or —
Alusuisse	884	—4
Bank Leu	3,825	—15
Brown Boveri	1,480	—20
Ciba Geigy	2,240	—10
do. (Part Certs)	1,735	—5
Credit Suisse	2,235	—5
Elektrowatt	2,680	...
Fischer (Geo.)	672	—3
Genevoise	3,700	+25
Hoff-Roche PtCts	100,000	
Hoff-Roche 1/10	9,975	—50
Jacobs Suchard	6,650	—50
Jelmoli	1,850	—20
Landis & Gyr	1,440	...
Nestle	5,200	+40
Oer-Buehrle	1,255	—5
Pirelli	249	—1
Sandoz (Br)	6,750	—50
Sandoz (PtCts)	1,010	—10
Schindler (PtCts)	575	...
Swissair	1,065	—15
Swiss Bank	336	—1
Swiss Reinsce.	8,000	...
Swiss Volksbk.	1,425	—10
Union Bank	3,470	...
Winterthur	3,030	—10
Zurich Ins	17,800	—100

AUSTRALIA

Apr. 24	Price Aust. $	+ or —
ANZ Group	5.66	...
Acrow Aust.	1.6	...
Alliance Oil D.	0.75	...
Ampol Pet	1.75	...
Aust Cons Ind	1.89	+0.01
Aust. Guarant	2.75	...
Aust. Nat. Inds.	2.68	+0.03
Aust. Paper	2.05	+0.03
Bell Group	6.26	—0.04
Bond Corp Hldgs	1.31	...
Boral	3.62	—0.03
B'ville Copper	2.65	...
Brambles Inds	2.85	...
Bridge Oil	2.8	—0.1
BHP	11.35xa	—0.2
CRA	6.14	+0.04
CSR	3.72	—0.03
Carlton Utd	4.2	...
Castlemaine Tys.	4.7	+0.02
Coles (G.J.)	3.78	+0.03
Comalco "A"	3.12	...
Consolidated Pet	0.78	—0.14
Costain Aust.	1.2	...
Dunlop Aust.	1.66	—0.01
E.Z. Inds.	5.76	+0.29
Elders IXL	4.05	...
Energy Res.	1.48	+0.01

AUSTRALIA (continued)

Apr. 24	Price Aust. $	+ or —
Gen Prop Trust	2.1	+0.02
Hardie (J.)	3.4	...
Hartogen Energy	3.1	—0.05
HeraldW'y Times	3.3	—0.02
ICI Aust	2.15	—0.05
Jimb'lana(50cFP	0.3	...
Kia Ora Gold	0.17	+0.01
Lend Lease	4.9	+0.05
MIM	3.62	+0.02
Mayne Nickless	2.55	...
Meckatharra	0.75	...
Myer Emp.	1.98	+0.08
Nat. Com. Bk.	3.55	...
News	10.4	...
Nicholas Kiwi	2.8	...
North Bkn Hill	2.75	...
Oakbridge	1.00	...
Otter Expl.	0.8	...
Pancont'l	1.37	+0.02
Pioneer Conc	1.6	...
Reckitt & Coln	3.65	+0.02
Repco	1.17	+0.02
Santos	6.9	...
Smith (H.)	3.9	+0.01
Southland Min'g.	0.42	+0.02
Spargos Expl	0.4	...
Thos. Natwide	1.92	+0.02
Tooth	5.2	...
Vamgas	3.55	+0.05
Western Mining	4.26	—0.02
Westpac	3.88	+0.03
Woodside Petrol.	1.12	+0.03
Woolworths	2.35	
Wormald Intl	3.26	

HONG KONG

Apr. 24	Price H.K.$	+ or —
Bank East Asia	25.2	+0.6
Cheung Kong	9.5	—0.35
China Light	12.4	—0.06
Hang Lung Devel	2.97	...
Hang Seng Bank	39.75	—1.5
HK Electric	6.1	—0.3
HK Kowloon Wh.	4.1	—0.2
HK Land	3.52	—0.2
HK Shanghai Bk.	7.15xa	—1.25
HK Telephone	44.75	—1
Hutchison Wpa	17.3	—0.4
Jardine Math	11.3	—0.05
New World Dev	3.55	—0.17
Orient O'seas	2.62	—0.06
O'seas Trust Bk.	3.4	—0.01
SHK Props.	7.5	—0.2
Swire Pac A	18.5	—0.7
Wheel'k Mard A	3.6	—0.17
Wheel'k M'time	2.05	...
World Int. Hldgs.	2.26	—0.17

JAPAN

April. 24	Price Yen	+ or —
Ajinomoto	1,090	...
Alps Electric	2,470	—20
Amada	1,300	+10
Asahi Chem	589	+5
Asahi Glass	770	+10
Bridgestone	610	...
Canon	1,300	—20
Casio Comp.	1,260	—40
Chugai Pharm	1,040	+20
Citizen	580	+4
Daiei	729	+9
Dai Nippon Ptg	1,140	+60
Daiwa House	474	—4
Ebara	337	...
Eisai	1,110	+10
Fanuc	9,140	—20
Fuji Bank	1,020	—10
Fuji Film	1,690	—60
Fujisawa	800	—12
Fujitsu	1,280	—10
Green Cross	1,820	—40
Hasegawa	375	
Heiwa Real Est.	608	—10
Hitachi	936	—9
Hitachi Credit	1,570	—20
Honda	1,100	—10
House Food	772	...
Hoya	2,010	—50
Itoh (C)	308	—3
Ito.Yokado	2,130	...
Iwatsu	1,870	...
JACCS	675	—8
JAL	2,800	—50
Jusco	840	...
Kajima	295	—3
Kao Soap	801	—14
Kashiyama	615	—17
Kirin	620	...
Kokuyo	1,100	+20
Komatsu	485	+8
Konishiroku	646	—2
Kubota	311	...
Kumagai	469	—6
Kyoto Ceramic	5,890	—10
Maeda Const	510	+9
Makino Milling	1,400	...
Makita	1,040	+10
Marubeni	339	—4
Marudai	627	+4
Marui	1,260	—10
MEI	1,860	—20
M'ta Elec Works	763	—7
M'bishi Bank	1,030	...
M'bishi Corp.	554	—4
M'bishi Elec	426	—4
M'bishi Estate	529	+4

JAPAN (continued)

April. 24	Price Yen	+ or —
MHI	250	+2
Mitsui Co.	355	—5
Mitsui Estate	723	—7
Mitsukoshi	347	—1
NGK Insulators	758	—15
Nihon Cement	217	—2
Nippon Denso	1,650	+10
Nippon Elect	1,380	—10
Nippon Express	301	+2
Nippon Gakki	630	—10
Nippon Kokan	144	+1
Nippon Oil	1,170	...
Nippon Seiko	627	+12
Nippon Shimpan	648	—7
Nippon Steel	173	—3
Nippon Suisan	340	...
NTV	15,000	—590
Nippon Yusen	240	—3
Nissan Motor	666	...
Nisshin Flour	420	—6
Nisshin Steel	209	...
Nomura	641	—16
Olympus	925	+4
Omron Tateisi	2,130	—140
Orient Leasing	3,780	—80
Pioneer	2,450	—40
Renown	683	+2
Ricoh	1,060	—10
Sankyo	721	—8
Sanyo Elect	517	—5
Sapporo	426	...
Sekisui Prefab	570	—1
Seven Eleven	8,600	—70
Sharp	1,170	—20
Shimadzu	590	+8
Shionogi	618	—2
Shiseido	1,140	—10
Sony	3,570	—60
Stanley	796	+1
S'tmo Bank	1,100	—20
S'tomo Elect	913	—10
S'tomo Marine	498	—12
S'tomo Metal	169	...
Taihei Dengyo	461	—9
Taisei Corp	212	—3
Taisho Pharm	981	—14
Takeda	720	—5
TDK	5,740	—90
Teijin	425	+8
Teikoku Oil	699	+9
Tokyo Marine	655	—6
TBS	860	—10
Tokyo Elect Pwr.	1,250	—10
Tokyo Gas	172	—1
Tokyo Sanyo	825	+14
Tokyo Style	798	...
Tokyu Corp	311	—3
Toppan Print	782	+1
Toray	466	+3
Toshiba Elect	425	—2
TOTO	650	...
Toyo Seikan	800	...
Toyota Motor	1,360	+10
Victor	2,720	—40
Wacoal	790	—12
Yamaha	510	—1
Yamanouchi	1,410	—10
Yamazaki	733	—5
Yasuda Fire	335	—2
Yokogawa Bdge.	416	—4

SINGAPORE

Apr. 24	Price $	+ or —
Boustead Hldgs.	2.57	—0.01
Cold Storage	4.18	—0.02
DBS	10.0	—0.1
Fraser & Neave	8.2	—0.05
Genting	5.3	...
Haw Par. Bros	2.6	+0.01
Inchcape Bhd.	2.88	+0.01
Keppel Shipyard	3.08	...
Malay Banking	10.0	—0.3
Malay Brew	6.8	...
Multi Purpose	1.91	+0.01
OCBC	10.5	...
OUB	4.34	—0.04
Sime Darby	2.45	—0.05
Straits St'mship.	1.58	...
Straits Trdg.	5.8	—0.05
UOB	5.30	...

SOUTH AFRICA

Apr. 24	Price Rand	+ or —
Abercom	2.45	...
AE & CI	8.50	...
Anglo Am Coal	29.75	+0.25
Anglo Am Corp	25.0	+0.1
Anglo Am Gold	153	...
Barclays Bank	21.0	+0.5
Barlow Rand	14.7	+0.2
Buffels	82.0	+1.5
CNA Gallo	3.8	...
Currie Finance	5.25	...
De Beers	9.60	—0.05
Driefontein	48.50	...
FS Geduld	53.5	+0.5
Gold Fields S.A.	29.5	+0.25
Highveld Steel	6.1	...
Nedbank	17.25	+0.75
OK Bazaars	18.5	...
Protea Hldgs.	3.05	+0.05
Rembrandt	27.00	+1.25
Rennies	15	...
Rust. Plat.	15.15	+0.05
Sage Hldgs.	6.2	...
SA Brews	7.65	+0.05
Smith (C.G)	26.25	...
Tongaat Hulett	11.8	...
Unisec	5.65	...

OVER-THE-COUNTER

Nasdaq national market, 3pm prices

Stock	Sales (Hnds)	High	Low	Last	Chng
[illegible]					

LONDON

Chief price changes
(In pence unless otherwise indicated)

RISES

Tr. 12% 1992	£111¾	+£¾
Exch. 12 2013/17	£122¾	+£½
Anchor Chem	104	+ 7
Dataserv	93	+ 9
De Vere Hotels	322	+ 17
Dura Mill	375	+ 95
Emess Lighting	273	+ 5
Henriques (A.)	44	+ 5
Quick (H. & J.)	65	+ 5
Smith Bros	114	+ 6
Spear & Jackson	150	+ 4
Petranol	333	+ 15
Blyvoor	£11	+£½
Cons Gold	595	+ 10
Cons Murch	902	+ 20
Eagle Corp	14	+ 2½
Pengkalen	650	+100

FALLS

Allied Irish Banks	168	— 10
Bank of Ireland	345	— 18
Body Shop	170	— 25
Brengreen	50	— 2½
Comm. Union	209	— 6
Glaxo	865	— 10
Hong Kong Land	31½	— 2½
Jardine Matheson	101	— 7
Ladbroke	233	— 10
Minster Assets	140	— 4

Continued on Page 40

CANADA

TORONTO
Prices at 2.30 pm April 24

Sales	Stock	High	Low	Close	Chng
[illegible]					

AMERICAN STOCK EXCHANGE PRICES

Continued from Page 31

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close	Ch'ge Prev. Close
[illegible]										

MARKET REPORT

Equities drift quietly lower but Gilt-edged stocks rally after eight-day fall

Account Dealing Dates

Option *First Dealings	Declarations	Last Dealings	Account Day
Apr 9	Apr 26	Apr 27	May 8
Apr 30	May 10	May 11	May 21
May 14	May 31	June 1	June 11

* "New-time" dealings may take place from 9.30 am two business days earlier.

Concern over the mineworkers' situation and the depressed state of U.S. financial markets continued to inhibit interest when the London Stock Exchange resumed trading yesterday after the holiday recess. Wall Street's renewed weakness on Monday ensured a cautious opening tone in both equities and Government stocks, but whereas the latter eventually recovered strongly, leading shares made only a marginal rally late.

Equity traders described business as comparable with the volume usually experienced during a shortened Christmas Eve session. Continuation of the spell of fine Easter weather obviously tempted many investors to extend their holiday break. Likewise, some member firms seemed to be working with fewer operatives than usual.

The lack of investment enthusiasm came as no surprise to stockjobbers. Most had anticipated reduced business levels this week not only because of the miners' dispute and adverse U.S. influences, but also owing to London market technicalities. Three of the five largest jobbing firms complete their financial years on Friday, which also brings the current extended trading Account to its end.

Secondary industrials provided few features but the odd situation issue relieved the drab overall picture. Nearly two-thirds of the constituents of the FT Industrial Ordinary share index shed a few pence but the measure, after being 5 points down at 3 pm, picked up in the after-hours' trade to close a net 3.8 down at 876.2; this followed an attempted rally early yesterday on Wall Street.

Government securities looked certain initially to further their unbroken eight-day decline. Longer-dated stocks were soon ½ down on resumed nervous selling, but then cheap buyers appeared and the losses were quickly regained. Continuation of the demand later took quotations higher in markets seemingly oversold and possibly too nervous of the counter-attractions of U.S. bonds.

Sterling's fall against the dollar failed to deter buyers and, although afternoon business was thin, the upward movement continued. Eventually, many longs closed ¼ up on balance, but the shorts failed to show similar resilience and settled fractionally softer on the day.

CU down again

A drifting market of late—down 13 last week—on fading bid hopes, Commercial Union continued to retreat and closed a further 6 lower at 209p, after 205p, following adverse weekend Press comment. Other Composites also gave ground on sporadic offerings and lack of support. Royals relinquished 7 to 568p and GRE declined 5 to 575p, while General Accident softened a couple of pence to 458p.

Recently firm Irish banks took a tumble, Allied Irish closing 10 off at 168p and Bank of Ireland 18 down at 345p. Among merchant banks, Minster Assets reflected fading bid hopes and fell to 138p before closing a net 4 easier at 140p.

Among recently-issued equities, Petranol drew fresh support on Texas exploration hopes and gained 15 to 333p, but USM-quoted Body Shop International encountered profit-taking and fell 25 to 170p.

Leading Buildings encountered scrappy selling in markets not helped by the latest gloomy survey of construction prospects. Costain lost 4 to 314p and Taylor Woodrow slipped 5 to 710p, while Barratt Developments softened a couple of pence to 132p. BMC, which reported bumper profits last week, cheapened 4 to 458p. Against the trend, Blue Circle firmed 5 to 417p; the annual results are due tomorrow. Elsewhere, Ward Holdings added 3 at 138p following an investment recommendation, while Whatlings, in which Marchwiel recently acquired Sybron's 15.6 per cent stake, gained the same amount to 86p. Lower annual profits left Thomas Warrington a couple of pence cheaper at 87p, but satisfactory preliminary figures accompanied by a land and building revaluation helped Feb International A gain the turn to 111p. Leyland Paint attracted revived speculative demand and put on 1½ to 24½p.

Ahead of tomorrow's first-quarter figures, ICI drifted back to 600p before settling a net 4 down at 602p. Laporte Industries, a strong market since the announcement of a major disposal, and also due to unveil results tomorrow, hardened 3 to 443p. Among other Chemicals, Anchor gained 7 to 104p following increased annual profits and an optimistic statement. William Ransom improved 4 to 210p and Novo Industries B rose 5 points to £179.

Bentalls dip and rally

Leading Retailers passed another uneventful session as investors' enthusiasm was directed elsewhere. With the exception of Raybeck, which firmed a couple of pence to 47p following a newsletter recommendation, most were content to hover either side of their pre-holiday levels.

Another batch of company trading statements provided the interest among secondary Stores. Bentalls were volatile and dipped to 47p on the warning about current trading, which accompanied increased full-year profits and dividend, but rallied to finished a net 2 dearer at 55p. Moss Bros. held at 275p, after 270p, following the 1-for-5 scrip issue with the preliminary figures, while Ellis and Goldstein, annual results expected today, hardened a couple of pence to 53p.

Despite cautious weekend Press comment, Arthur Henriques advanced 5 to 44p on hopes of a "shell" operation in the wake of the offer from Maxmillian. Dealings in Rowland Gauss were suspended at 129p pending acquisition details. Fortnum and Mason, buoyant last Thursday on better-than-expected annual results, succumbed to profit-taking and shed 2 points at £19, while Press mention lifted mail-order house Grattan to 100p before a close of 96p—for a net loss of 2. Martin the Newsagent again attracted support after-hours to end 10 dearer at 178, while Milletts Leisure firmed a couple of pence to 132p following the purchase of Black and Edgington's 50 per cent stake in Milletts Shops Scotland; B & E were unchanged at 108p. Milletts is scheduled to announce preliminary figures on Thursday week.

Secondary issues provided the focal points in Electricals. Dataserv attracted buyers ahead of preliminary results, scheduled for May 10, and closed 9 higher at 93p. Microfocus reflected Press comment with a gain of 10 to 870p, while Energy Services improved 2 to 44p for the same reason. Emess Lighting advanced 5 to 273p in response to the good results and proposed 100 per cent scrip-issue. Awaiting tomorrow's annual figures, Telephone Rentals put on 3 to 178p, and Lee Refrigeration 5 to 425p. Arlen came on offer at 69p, down 7, while CASE, 750p and Security Tag Systems, 380p, dropped 20 apiece. The weakness of Hong Kong issues brought sympathetic reactions of around 3 to both RSB, 305p, and Cable and Wireless, 352. Thorn EMI cheapened 5 to 645p among the leaders, but GEC were unaffected by de Zoete and Bevan's downgraded profits forecast and closed a penny harder on balance at 178p.

A good market last week on excellent results, Hawker Siddeley eased 3 to 452p in a quiet Engineering sector. Elsewhere, Spear and Jackson rose 4 to 150p in anticipation of today's preliminary results, while Thomas Robinson hardened a couple of pence to 41p in response to Press comment. A. Cohen added 15 at 415p in a thin market and Hopkinsons firmed 4 to 123p.

Apart from fresh takeover speculation in Rowntree Mackintosh, which touched 294p before reacting to close 4 cheaper on balance at 286p, leading Foods tended to drift easier. Tate and Lyle lost 5 to 408p and S. & W. Berisford softened a couple of pence to 196p. Among Retailers, Associated Dairies eased 2 to 169p and Kwik Save shed 4 to 174p.

The Hotel sector displayed a bright feature in De Vere, which encountered speculative demand aroused by talk of a 400p per share bid for the company and advanced 17 to 322p. In sharp contrast, the leaders all lost ground. Ladbroke, 10 down at 233p, were the major casualty.

Jardine Matheson fall

Hong Kong-based issues among miscellaneous industrials took a distinct turn for the worse on domestic market influences—the Hang Seng index fell 50 points yesterday. Jardine Matheson led the retreat, falling 7 to 101p, while Swire Pacific A gave up 6 at 168p and China Light 5 at 112p. Hong Kong Land declined 2½ to 31½p as did Swire Properties, to 59p.

Elsewhere, miscellaneous industrial leaders gave ground on lack of support. Unilever lost 15 to 895p and Glaxo shed 10 to 865p. Beecham cheapened 5 to 315p, Bowater lost the same amount at 325p and Fisons fell 8 to 785p. Brengreen became a notable casualty among secondary issues, falling 2½ to 50p following news of the sudden departure of deputy chairman, Mr F. R. Agar. Clement Clarke lost 5 to 140p on disappointment with the results, while renewed profit-taking left recently-firm S. Pearson 8 easier at 550p. Cosalt, on the other hand, gained 3 to 72p in response to an investment recommendation and EIS firmed 5 to 168p ahead of tomorrow's preliminary results. Still awaiting further news of the bid approach, Waterford Glass hardened a penny to 43p.

Lucas hardened the turn to 225p, after 224p, following confirmation of the sale of its interest in loss-making French motor component concern Ducellier. Elsewhere, Distributors featured Ford dealers H. & J. Quick, which responded to revived demand with a gain of 5 to 65p.

Properties passed a quiet session. The leaders closed a shade lower with Land Securities losing the turn to 283p. Among secondary issues, Priest Marians found support and, in a restricted market, moved up 10 to 500p. Peel Holdings firmed 8 to 238p and Mountleigh improved 5 to 280p. The satisfactory annual profits and dividend increase helped Rush and Tompkins improve a couple of pence to 254p.

Textiles again lacked interest. Favourable Press comment prompted modest gains in British Mohair, 85½p, and Nottingham Manufacturing, 272p, with the latter attaining a new 1984 high. Dura Mill continued to benefit from talk of a possible "shell" operation in the wake of the 225p per share offer from Corporate Financial Services and spurted 95 to record a two-day gain of 160 to 375p.

Weekend comment drawing fresh attention to the deal between National Westminster and Bisgood Bishop resulted in increased demand for stockjobbers Smith Brothers, which rose 6 for a two-day advance of 13 to 114p.

Late rally in oils

Oils opened a shade easier and held at the lower level until a brief flurry in the after-hours' trade saw the majority of leading issues pick up to close with minor gains on balance.

BP eased to 498p initially but recovered to close a net 5 up at 505p, while Britoil, down to 265p in the early trading, were finally a net 2 harder on balance at 270p. Similar gains were common to LASMO, 328p, Tricentrol, 205p, after 200p, and Ultramar, 577p.

Irish issues drifted back. Bryson Oil were 5 lower at 350p and Atlantic Resources a couple of pence easier at 66p. Among international oils, Australia's Bridge Oil receded 8 to a 1984 low of 185p. Elsewhere, a disappointing drilling report left Global Natural Resources 10 off at 420p.

Golds remains firm

A steady performance by the bullion price in U.S. markets over the Easter holiday period encouraged a good showing from mining markets, despite an obvious lack of business.

South African Golds gained ground for the fourth successive trading day and generally shrugged off the rather lack-lustre trend in bullion, which eased back to close a net $1.25 lower at $383.75 an ounce.

Continental operators were content to hold their pre-weekend positions, but demand from London and Johannesburg sources was sufficient to produce a further 2.9 rise to 686.1 in the FT Gold Mines index, although share prices were looking rather uncertain in the after-hours' trading.

The Johannesburg buying was mainly directed towards recently-firm marginal issues and lifted West Rand Consolidated 15 to a 1984 high of 400p. Egoli Consolidated hardened 5 to a year's best of 140p.

The financial sector was dominated by Consolidated Gold Fields which attracted a fair amount of overseas buying interest and advanced a further 10 to 595p.

South African Financials provided a firm feature in "Amcoal," which moved up ¾ to £16¾, while persistent Cape support lifted "Amgold" a half-point to £86½. De Beers, however, suffered from lack of interest and drifted back to close at 545p, while New Witwatersrand retreated 14 to 601p.

The closure of the Melbourne market and a restricted attendance on the Sydney exchange overnight ensured a subdued market in Australians. The leaders made moderate progress. MIM rose 5 to 235p and Western Mining hardened 4 to 224p, while the speculatives were highlighted by Eagle Corporation which closed 2½ firmer at a 1984 high of 14p following favourable weekend Press comment and rumours that the company has made an encouraging oil discovery.

In Tins revived takeover speculation saw Pengkalen jump 100 to 650p. Elsewhere, South Africa's gold/antimony producer Consolidated Murchison were 20 to the good at 902p.

Interest in Traded Options remained at a low ebb and total contracts struck amounted to only 2,451—1,560 calls and 891 puts. Last week's daily average amounted to 2,989. Once again, operators' enthusiasm was directed towards recent takeover candidate Commercial Union which attracted 240 calls and 379 puts; 237 of the latter were done in the July 200 series. The April 220 puts closed 5 up at 12p.

FINANCIAL TIMES STOCK INDICES

	April 24	April 19	April 18	April 17	April 16	April 13	year ago
Government Secs	81.86	81.65	81.94	82.03	82.05	82.43	81.71
Fixed Interest	86.56	86.31	86.51	86.30	86.29	86.43	83.72
Industrial Ord	876.2	880.0	888.8	879.8	875.2	895.2	695.2
Gold Mines	686.1	683.2	679.4	673.3	672.5	672.5	644.3
Ord. Div. Yield	4.38	4.36	4.32	4.35	4.36	4.30	4.49
Earnings, Yld.% (full)	10.09	9.97	9.89	9.91	9.99	9.80	9.16
P/E Ratio (net) (*)	11.96	12.11	12.21	12.21	12.11	12.35	13.23
Total bargains (Est.)	20,090	32,277	22,026	22,534	24,695	24,588	22,509
Equity turnover £m	—	288.36	320.12	292.69	263.01	330.97	220.68
Equity bargains	—	16,637	17,565	21,178	23,014	20,534	21,251
Shares traded (ml)	—	136.1	140.2	159.6	164.9	177.3	136.1

10 am 878.0. 11 am 876.2. Noon 876.4. 1 pm 876.4. 2 pm 876.0. 3 pm 875.0.

Basis 100 Govt. Secs. 8/1/58. Fixed Int. 1928. Industrial 1/7/35. Gold Mines 12/9/55. SE Activity 1974.

Latest Index 01-246 8026.

*Nil=11.40.

HIGHS AND LOWS

	1984 High	1984 Low	Since Compilat'n High	Since Compilat'n Low
Govt. Secs.	83.77 (9/1)	81.65 (19/4)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	87.48 (14/3)	86.29 (16/4)	150.4 (28/11/47)	50.53 (3/1/75)
Ind. Ord.	901.4 (2/3)	770.3 (4/1)	901.4 (2/3/84)	49.4 (26/6/40)
Gold Mines	711.7 (3/2)	620.2 (17/1)	734.7 (15/2/83)	43.5 (26/10/71)

S.E. ACTIVITY

	April 19	April 18
Daily Gilt Edged Bargains	136.7	155.7
Equities Bargains	107.7	113.7
Value	612.1	640.7
5-day Average Gilt Edged Bargains	158.9	164.7
Equities Bargains	129.2	132.5
Value	594.1	615.1

NEW HIGHS AND LOWS FOR 1984

NEW HIGHS (68)

BRITISH FUNDS (2)
Treas. 3pc 1985 Treas. 2½pc I.L. '09
AMERICANS (4)
Exxon Pillsbury
Gulf Corp. Sect Co. F. J.
CANADIANS (1)
Imperial Oil
BANKS (1)
Seccombe Marshall
BREWERS (1)
Moray Firth Maltings
BUILDINGS (3)
Bellway Lawrence (W.)
Dudley
CHEMICALS (2)
Anchor Chemical Ransom (William)
STORES (6)
Bentalls Grattan
Ellis & Goldstein Martin Newsagent
Gee (Cecil) Stanley (A. G.)
ELECTRICALS (1)
Dewhurst
ENGINEERING (3)
Brown & Tawse Hopkinsons
Cohen (A.)
FOODS (2)
Hazlewood Needlers
HOTELS (2)
De Vere Hotels Kennedy Brookes
INDUSTRIALS (11)
Christie-Tyler Jorgensen
Cosalt Lamont Hldgs.
Dewey Pe Indus.
Hay (N.) Sandhurst Marketing
Intereurope Tech. Wills (Geo.)
INSURANCE (1)
Heath (C. E.)
LEISURE (2)
Julianas Television Services
MOTORS (4)
Appleyard Quick (H. & J.)
Davis (Godfrey) Lookers
NEWSPAPERS (2)
Collins (Wm.) Do. A Routledge Keg. Paul
PAPERS (2)
Bowd Fitch
PROPERTY (2)
Peel Hldgs. Priest Marians
SOUTH AFRICANS (1)
Tiger Oats
TEXTILES (2)
Notts. Mfg. Toray
TRUSTS (6)
Danae Inv. Raeburn
Family Inv. Tor
Fleming Enterprise Smith Bros.
OILS (1)
Woodside Pet.
MINES (5)
Egoli Cons. Eagle Corp.
Simmer & Jack Pengkalen
Blyvoor.

NEW LOWS (27)

BRITISH FUNDS (2)
Treas. 15pc 1985 Transport 3pc '78-88
INT. BK. & O'SEAS GOVT. STLG. ISS. (1)
Aust. 11½pc Ln. 2015
AMERICANS (3)
Browning-Ferris ITT
Cont. Illinois
CANADIANS (1)
Can. Imp. Bank
ELECTRICALS (2)
Arlen Electrical Newmark (Louis)
ENGINEERING (1)
Davies & Metcalfe A
INDUSTRIALS (8)
Assoc. Brit. Eng. Initial
Brengreen Metamec Jentique
Brunons (Mussel.) Oakwood
Fogarty Deld. Zygal Dynamics
INSURANCE (1)
Legal & General
LEISURE (1)
Owners Abroad
MOTORS (2)
Hartwells Young (H.)
TRUSTS (2)
Alliance Trust Mills & Allen
OILS (2)
Bridge Oil Internatl. Petroleum
OVERSEAS TRADERS (1)
Nesco Invs.

FT - SE 100 INDEX

Close .... 1105.4 (−3.0)
Day's high .... 1105.6 (10.21 am)
Day's low .... 1102.8 (2.39 pm)
Base value=10000 December 30 1983

RECENT ISSUES

EQUITIES

Issue price	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price	+ or −	Net Div.	Times Covered	Gross Yield	P.E. Ratio
270	10	—	105	99	Assoc Brit Ports	102	......	8.5	—	4.5	—
915	F.P.	—	£11	£10	Biotechnology Invs 2c	£10	......	FQ10c	—	0.7	—
‡95	F.P.	10/5	195	145	✣Body Shop 5p	170	−25	b1.6	2.2	4.6	43.6
‡155	F.P.	27/4	182	166	Burmatex 10p	182	......	b5.0	1.9	3.9	18.8
‡67	F.P.	—	205	155	✣CPS Computer 20p	165	......	u1.0	8.6	0.9	61.1
25	F.P.	13/4	33½	20½	Cambium Venture 5p	21	......	—	—	—	—
100	F.P.	3/5	102	97	C. J. R. Pacific Inv. Tst	101	+1	—	—	—	—
—	F.P.	5/5	42	27	Do. Warrants	41	−1	—	—	—	—
—	F.P.	—	38	12½	✣Cluff Oil Warrants	29	......	—	—	—	—
‖	F.P.	—	128	118	Commerc'l Bk Wales £1	118	......	7.5	2.1	9.1	6.8
120	F.P.	27/4	160	132	Connells Estate Agts 5p	132	−1	g2.8	2.3	3.0	20.2
—	F.P.	—	27	24	Cons. Venture 120 W'rts	17	......	—	—	—	—
§162	F.P.	4/4	177	170	✣Denmans Electrical	175	......	43.6	3.9	2.9	11.3
—	F.P.	10/5	41	37	Eng. & Int'l Tst. War.	37	−1	—	—	—	—
180	F.P.	11/5	205	195	First Leisure Corp. £1	202	......	u6.0	2.1	4.2	15.2
§114	F.P.	19/4	147	132	✣Formdesign 20p	147	+2	bgd5.8	52.4	3.7	15.0
†US65	40	—	24	20	Fledgeling Japan 1c	20	−1	—	—	—	—
—	F.P.	—	25	23	Do. Warrants	23	−1	—	—	—	—
§75	F.P.	11/5	90	80	✣Havelock Europa 10p	88	......	bg.16	3.4	2.6	20.8
*156	F.P.	17/4	117	83	✣Horne (Robert) 20p	117	+1	u2.46	3.3	3.0	14.1
—	F.P.	17/4	109	78	Do. N/V 'A' 20p	109	......	u2.46	3.3	3.2	13.1
§130	F.P.	11/5	157	140	✣MeadowF'm Prod 10p	154	−1	bg3.68	2.7	3.4	12.5
125	F.P.	10/5	120	102	✣Nth Sea & Gen. Oil £1	112	......	—	—	—	—
§52	F.P.	27/4	80	57	Osprey Communic'tns	58	−2	N1.0	—	2.5	—
215	F.P.	27/4	268	230	Our Price 20p	235	......	bg6.0	3.7	1.8	17.5
§80	F.P.	—	104	101	✣Pantherella	103	......	u3.3	2.5	4.5	12.5
§125	F.P.	13/4	333	140	Petranol 10p	333	+15	—	—	—	—
‖	F.P.	—	275	263	Plantation & Gen Invs	275	......	4.0	3.1	2.1	18.2
§120	F.P.	13/4	165	138	✣Platon Intl.	143	......	bg1.84	5.5	1.6	11.9
160	F.P.	13/4	255	225	✣Powerline Int'l. 5p	250	......	bg1.4	3.9	0.8	48.3
§70	F.P.	25/5	100	90	✣Ramco Oil Ser's 10p	98	......	u0.7	5.3	1.0	19.6
160	F.P.	26/4	305	230	Robertson Res'rch 10p	240	......	bg3.0	2.9	1.8	26.5
§78	F.P.	11/5	128	103	✣Scantronic 2½p	126	......	bg1.6	2.0	1.8	31.9
270	F.P.	19/4	500	410	Systems Reliabil'y 10p	470	......	g5.78	2.9	1.2	38.4
§145	F.P.	27/4	192	168	✣Tod (W. & J.) 5p	175	......	bg2.5	2.1	2.0	29.1
—	F.P.	—	35	34	Utd. Biscuits Warr'nts	35	......	—	—	—	—

FIXED INTEREST STOCKS

Issue price £	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price £	+ or −
98.19	£25	—	25⅛	25¼	Border & S'thern 11½% Deb. Stk. 2014	25⅛	......
97.072	£25	1/7	28⅝	25¼	Brixton Est. 11¼pc 1st Mort. Deb. 2023	27	−¼
£100	F.P.	10/5	93½	91¾	Eng. & Intl. Tst. 10½% Deb. 2014	92	......
98.043	£30	26/6	30⅝	29⅛	Finland 11⅛% Ln. 2009	29⅛	−⅛
‖	Nil	15/6	22pm	11pm	Home Charm 7½Cnv. Uns. Ln. 1997/2004	11pm	−1
99.714	£30	26/4	36⅝	30	Int. Bk. for Rec. & Dev. 11.5% Ln. 2003	32⅛	−1⁄16
§95.711	£25	15/6	27¼	24½	MEPC 10¾pc 1st. Mort. Deb. 2024	25⅛	−⅛
—	F.P.	—	100	99 1⁄16	Nationwide 9 1⁄16% 25/3/85	99½	......
—	F.P.	—	100 1⁄16	100	Do. 9¾% 15/4/85	100	......
§97.80	£25	12/7	30½	25½	Province de Quebec 12¼% Ln. 2020	28½	−⅛
98.50	£25	11/5	27⅞	24⅞	TR City of London 11½pc Deb. 2014	26¾	−¼

"RIGHTS" OFFERS

Issue price	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price	+ or −
400	F.P.	17/5	553	480	A. B. Electronic	527	+2
75	Nil	—	36pm	34pm	Aidcom Intnl. 10p	35pm	−1
Fl.95	F.P.	—	£33¼	£22½	Akzo N/V Fl. 20	£23⅛	......
215	F.P.	10/5	332	305	Bowater £1	324	−5
98	Nil	-	15pm	13pm	Brit. Car Auction 10p	15pm	......
A$7.5	Nil	2/6	268pm	216pm	Broken Hill Prop. A$2	244pm	−8
Ir.62p	F.P.	6/4	57	51½	Cement-Roadstone	57	......
95	Nil	25/5	15pm	5pm	Evered	5pm	......
450	F.P.	16/5	495	475	Exco Intl	495	......
205	Nil	23/5	43pm	25pm	✣Garfunkels Rest 10p	33pm	−2
25	Nil	8/6	23pm	14pm	Glanfield Lawrence	23pm	......
130	F.P.	9/4	155	147	Grosvenor Group	155	......
80	F.P.	3/4	89	80	Hawley Group 12½p	87	+1
40	F.P.	16/4	43	39	✣Immed. Bus. Systems 10p	42	......
25	Nil	—	2½pm	2⅛pm	✣Intervision Video 10p	2⅛pm	......
5	Nil	—	14pm	12pm	Norfolk Cap. 5p	12pm	......
25	F.P.	11/5	37	25¾	Sutcliffe Speakman	25	......
50	F.P.	12/4	82	62	TSL Thermal Syndicate	66	−1

Renunciation date usually last day for dealing free of stamp duty. *b* Figures based on prospectus estimates. *d* Dividend rate paid or payable on part of capital: cover based on dividend on full capital. *g* Assumed dividend and yield. *u* Forecast dividend cover based on previous year's earnings. C Canadian. F Dividend and yield based on prospectus or other official estimates for 1984. H Dividend and yield based on prospectus or other official estimates for 1983-84. Q Gross. *p* Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation merger or take-over. ▪ Allotment letters (or fully-paid). ‖‖ Introduction. ✣ Unlisted Securities Market. § Placing price. †† Official London Listing. * Offered as units, comprising one ord and one N/V A ord. †Each unit comprises 5 shares and 1 warrant.

THURSDAY'S ACTIVE STOCKS

Based on bargains recorded in Stock Exchange Official List.

Stock	No. of changes	Thurs. close	Day's change
Biotech. New	15	£10	—
Petranol	15	318	+20
Hawker Sid.	14	455	−11
BTR	13	470	− 1
Waterford Glass	13	42	− 1
AMEC	12	240	+ 8
Body Shop New	11	195	+20
BP	11	500	—
British Printing	11	196	—
Cosalt	11	69	+ 3
Royal Insce.	11	575	− 5
ICI	10	606	−10
Legal & Gen.	10	455	−10
RTZ	10	655	− 8

ACTIVE STOCKS

Above average activity was noted in the following stocks yesterday.

Stock	Closing price	Day's change
Bentalls	55	+ 2
Body Shop New	170	−25
Brengreen	50	− 2½
BP	505	+ 5
Commercial Union	209	− 6
Cons. Gold Fields	595	+10
ICI	602	− 4
Ladbroke	233	−10
Lonrho	137	− 3
Minster Assets	140	− 4
Petranol	333	+15
Rowntree Mackintosh	286	− 4

OPTIONS

First Dealings	Last Dealings	Last Declaration	For Settlement
Apr 16	Apr 27	July 26	Aug 23
May 8	May 18	Aug 9	Aug 20
May 21	June 8	Aug 30	Sept 10

For rate indications see end of Share Information Service

Money was given for the call of Oliver Prospecting, Petranol, Redman Heenan, Reardon Smith A, Waterford Glass, Midland Industries, Barker and Dobson, Aran Energy, Cable and Wireless, Royal Bank of Scotland, Atlantic Resources, Birmid Qualcast, Talbex, Premier Oil, Eagle Corporation, Mungana and Eglinton Oil and Gas. A put was taken out in Barratt Developments, while a double was struck in Helene of London.

RISES AND FALLS YESTERDAY

	Rises	Falls	Same
British Funds	89	10	26
Corpns. Dom. and Foreign Bonds	1	7	72
Industrials	185	311	905
Financial and Props.	50	109	363
Oils	15	35	70
Plantations	—	2	18
Mines	54	22	98
Others	63	65	86
Totals	447	561	1,638

FT-ACTUARIES SHARE INDICES

These Indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

	EQUITY GROUPS & SUB-SECTIONS (Figures in parentheses show number of stocks per section)	Tues April 24 1984 Index No.	Day's Change %	Est. Earnings Yield% (Max.)	Gross Div. Yield% (ACT at 30%)	Est. P/E Ratio (Net)	Thurs April 19 Index No.	Wed April 18 Index No.	Tues April 17 Index No.	Mon April 16 Index No.	Year ago (approx.) Index No.
1	CAPITAL GOODS (202)	518.10	−0.1	8.91	3.58	14.32	518.57	522.36	521.20	518.07	484.42
2	Building Materials (24)	521.94	+0.2	10.67	4.23	11.69	521.12	523.55	514.82	512.92	441.20
3	Contracting, Construction (32)	772.45	−0.2	12.26	4.70	10.19	774.21	769.49	764.04	766.60	776.50
4	Electricals (14)	1726.94	−0.1	7.71	4.22	16.22	1728.81	1725.53	1709.75	1703.73	1863.33
5	Electronics (27)	1754.80	+0.1	8.13	2.17	15.93	1752.74	1775.32	1789.41	1774.01	0.00
6	Mechanical Engineering (62)	245.39	−0.4	10.74	4.88	11.50	246.32	248.55	245.91	242.28	223.79
8	Metals and Metal Forming (9)	196.19	−0.6	10.13	6.43	12.56	197.34	201.56	201.22	199.25	185.17
9	Motors (17)	139.79	−0.4	3.07	4.03	—	140.32	140.23	139.42	140.47	103.68
10	Other Industrial Materials (17)	684.07	−0.4	6.38	3.49	19.70	686.54	687.42	688.21	688.44	456.31
21	CONSUMER GROUP (195)	525.41	−0.4	9.79	3.90	12.45	527.78	530.23	526.68	527.66	434.41
22	Brewers and Distillers (23)	517.56	—	11.61	4.67	10.66	517.75	519.35	509.48	514.65	459.69
25	Food Manufacturing (22)	400.74	−0.6	13.07	5.35	8.85	403.28	405.86	402.26	400.78	341.81
26	Food Retailing (12)	1180.29	−0.6	7.13	2.49	18.06	1187.97	1184.58	1178.54	1180.36	857.23
27	Health and Household Products (9)	808.76	−1.1	6.07	2.98	19.41	818.05	820.04	815.15	807.18	850.49
29	Leisure (22)	685.97	−0.8	8.50	4.17	15.17	691.65	689.90	688.25	686.50	551.12
32	Newspapers, Publishing (14)	1354.42	+0.1	7.09	3.97	16.90	1353.30	1348.58	1341.06	1335.80	821.18
33	Packaging and Paper (15)	266.54	−0.5	9.79	3.94	12.39	267.92	268.98	265.14	265.33	156.39
34	Stores (47)	471.61	−0.1	7.62	3.31	17.72	472.05	476.07	478.59	478.04	383.93
35	Textiles (20)	303.42	−0.1	10.33	4.01	11.21	303.77	304.57	303.54	303.46	206.09
36	Tobaccos (3)	634.16	−0.5	17.45	5.68	6.47	637.07	646.37	634.84	652.61	448.25
39	Other Consumer (8)	488.38	−0.1	10.53	4.14	—	489.09	493.03	486.98	489.73	384.60
41	OTHER GROUPS (88)	450.51	−0.7	9.36	4.25	13.23	453.52	455.85	451.77	448.70	355.47
42	Chemicals (18)	618.61	−0.6	11.38	4.71	10.99	622.16	629.15	620.83	608.09	494.13
44	Office Equipment (5)	134.33	−0.5	7.95	3.52	16.28	135.05	135.06	134.38	134.60	107.33
45	Shipping and Transport (14)	873.08	−0.5	8.42	4.85	15.57	877.73	872.65	872.70	882.81	686.60
46	Miscellaneous (51)	606.12	−0.8	8.02	3.63	15.02	610.87	612.63	607.97	607.91	472.64
49	INDUSTRIAL GROUP (485)	516.79	−0.4	9.44	3.90	13.12	518.70	521.59	518.65	517.61	442.03
51	Oils (15)	1126.48	+0.5	11.44	6.00	10.62	1120.89	1125.82	1120.32	1112.98	876.70
59	500 SHARE INDEX	567.90	−0.2	9.78	4.25	12.62	569.16	572.22	569.06	567.49	478.27
61	FINANCIAL GROUP (120)	385.41	−0.3	—	5.39	—	386.56	388.68	387.73	387.92	325.24
62	Banks (6)	380.20	+0.1	23.84	7.16	4.92	379.97	383.15	381.75	382.20	350.98
63	Discount Houses (7)	478.22	−0.2	—	5.96	—	478.98	468.78	467.51	479.31	316.24
65	Insurance (Life) (9)	478.82	−0.3	—	5.56	—	480.42	486.31	486.95	487.24	411.78
66	Insurance (Composite) (9)	273.86	−1.1	—	6.41	—	277.01	279.90	281.02	281.14	214.70
67	Insurance (Brokers) (6)	776.57	+0.1	9.13	4.24	15.19	776.05	776.22	777.46	780.09	602.89
68	Merchant Bank (12)	246.06	−0.4	—	3.85	—	246.93	247.16	246.21	247.49	167.67
69	Property (53)	579.55	−0.2	5.22	3.45	25.70	580.42	580.93	575.47	573.17	482.11
70	Other Financial (18)	264.12	—	10.62	5.20	11.56	264.10	263.80	263.63	263.65	258.74
71	Investment Trusts (106)	511.87	−0.2	—	3.52	—	512.80	515.81	514.53	516.52	418.09
81	Mining Finance (4)	317.78	+0.3	9.04	4.72	13.28	316.94	318.84	319.46	317.21	284.29
91	Overseas Traders (16)	572.84	−1.1	7.89	6.47	16.85	578.97	580.00	579.04	580.46	455.32
99	ALL-SHARE INDEX (746)	522.44	−0.2	—	4.43	—	523.65	526.47	524.02	523.02	439.54

FIXED INTEREST

	PRICE INDICES	Tues April 24	Day's change %	Thurs April 19	xd adj. today	xd adj. 1984 to date
	British Government					
1	5 years	117.75	+0.03	117.72	—	4.10
2	5–15 years	130.29	+0.30	129.90	—	4.70
3	Over 15 years	138.81	+0.40	138.35	—	4.34
4	Irredeemables	152.80	+0.36	152.25	—	1.62
5	All stocks	129.05	+0.23	128.75	—	4.43
6	Debentures & Loans	108.69	−0.03	108.73	—	3.43
7	Preference	78.10	+0.02	78.08	—	2.55

	AVERAGE GROSS REDEMPTION YIELDS		Tues April 24	Thurs April 19	Year ago (approx.)
	British Government				
1	Low Coupons	5 years	10.25	10.23	9.27
2		15 years	10.35	10.41	10.11
3		25 years	9.88	9.93	9.98
4	Medium Coupons	5 years	10.86	10.89	11.14
5		15 years	10.81	10.86	10.89
6		25 years	10.25	10.25	10.32
7	High Coupons	5 years	10.97	11.00	11.16
8		15 years	10.97	11.03	11.07
9		25 years	10.31	10.36	10.47
10	Irredeemables		9.80	9.83	9.94
11	Debs & Loans	5 years	11.47	11.46	12.18
12		15 years	11.46	11.45	12.10
13		25 years	11.46	11.45	12.10
14	Preference		12.58	12.58	12.66

†Flat yield. Highs and lows record, base dates, values and constituent changes are published in Saturday issues. A list of constituents is available from the Publishers, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 15p, by post 28p.

EUROPEAN OPTIONS EXCHANGE

Series		May Vol.	May Last	Aug. Vol.	Aug. Last	Nov. Vol.	Nov. Last	Stock
GOLD C	$400	10	3	42	12.50	1	22	$383.70
GOLD C	$425	15	0.90	6	6	8	13	
GOLD P	$400	16	16.50	6	[illegible]	[illegible]	[illegible]	
		June		Sept.		Dec.		
SILVER C	$8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$9.34
SILVER C	$9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
SILVER C	$10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
SILVER C	$11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
SILVER P	$9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
SILVER P	$10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
		April		July		Oct.		
ABN P	F360	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.375
ABN P	F380	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
AH P	F160	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.169.70
AKZO C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.110.70
AMRO C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.69.30
GIST C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.129.50
HEIN C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.157
HOOG P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
KLM C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.171.50
KLM P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.45
PHIL C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.46
PHIL P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
RD C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.165.50
RD P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
UNIL C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.252.70
UNIL P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	F.162.45

TOTAL VOLUME IN CONTRACTS 16,461

A=Ask B=Bid C=Call P=Put

LONDON TRADED OPTIONS

Option		Calls Apr.	Calls July	Calls Oct.	Puts Apr.	Puts July	Puts Oct.
B.P. (*500)	390	115	123	—	0¼	3	—
	420	85	92	100	0¼	4	8
	460	45	55	65	0¼	10	17
	500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cons. Gold (*595)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Courtaulds (*146)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Com. Union (*210)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
G.E.C. (*177)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Grand Met. (*350)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
I.C.I. (*600)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Land Sec. (*283)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marks & Sp. (*245)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shell Trans. (*630)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Option		Calls May	Calls Aug.	Calls Nov.	Puts May	Puts Aug.	Puts Nov.
Barclays (*474)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Imperial Gp. (*143)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LASMO (*326)	260	70	83	—	2	6	—
	280	50	63	75	2	10	9
	300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lonrho (*136)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P. & O. (*303)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Racal (*210)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
R.T.Z. (*653)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vaal Reefs (*$132)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Option		Calls June	Calls Sep.	Calls Dec.	Puts June	Puts Sep.	Puts Dec.
Beecham (*315)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Boots (*181)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
De Beers	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Guest Keen (*193)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hanson (*189)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tesco (*168)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Apr. 24. Total Contracts 2,451. Calls 1,560. Puts 891.
*Underlying security price.

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

1984 High	1984 Low	Stock	Price £	+ or −	Yield Int.	Yield Red.
101 11/16	100 11/16	Exch 14pc 1984	100 11/16xd	.....	13.95	9.39
99⅝	97⅞	Exch. 3pc 1984	99⅝	+ 1/16	3.03	8.80
101 13/16	101 7/16	Treas 12pc 1984	101 7/16	− 1/32	11.86	8.80
105⅝	104 13/16	Treas. 15pc 1985	104 13/16	− 1/16	14.36	9.16
102⅞	102¼	Exch. 12pc Cnv. '85	102⅜	− 1/32	11.72	9.16
95	93⅞	Treas 3pc 1985	95xd	+ 1/16	3.16	7.98
102⅝	101 15/16	Treas 11½pc 1985	102¼	.....	11.25	9.47
99⅞	98⅛	Treas 8¾pc Cnv '85	98 13/16	.....	8.86	9.64
104 1/16	102 15/16	Exch. 13¼pc 1985	103 15/32xd	.....	11.84	9.80
103 13/16	102¼	Exch. 11¾pc '86	103 3/16	.....	11.40	9.84
102 3/16	100 1/16	Treas. 10pc Cnv 1986	100½	+⅛	9.95	9.70
90¼	88¼	Treas 3pc 1986	89¼xd	.....	3.36	8.81
102	100⅜	Exch. 10½pc Cv '86	100⅞xd	+⅛	10.41	10.04
104 3/16	102½	Treas 12pc 1986	103 5/16	+ 1/16	11.63	10.19
98⅜	97⅛	Treas 8½pc 1984-86‡‡	97 3/16	.....	8.75	9.93
108 13/16	107 3/16	Exch. 14pc 1986	108 1/16xd	− 1/16	12.96	10.27
87⅛	85	Exch. 2½pc 1986	85 15/16xd	.....	2.91	8.72
107 15/16	106 1/16	Exch. 13¼pc 1987	106⅝	− 1/16	12.43	10.37
100⅝	98 13/16	Treas 10¼%Cv '87	99⅝	− 1/16	10.29	10.37
86⅛	83 15/16	Exch 2½pc 1987	84	.....	2.98	9.03
101 1/16	99⅛	Exch. 10½pc 1987	100	− 1/16	10.50	10.49
92 11/16	90⅛	Funding 6½pc '85-87‡‡	90 13/16xd	− 1/16	7.15	10.06
99⅝	97 13/16	Treas. 10pc 1987	98½	.....	10.15	10.55
85	82⅛	Treas 3pc 1987	82½	+ 1/16	3.63	9.32
105	103 3/16	Treas. 12pc 1987	104xd	.....	11.54	10.60
94⅞	92	Treas 7¾pc 1985-88‡‡	92¾	− 1/16	8.36	10.09
100⅝	99 1/16	Exch 10½pc '88	99¾xd	.....	10.53	10.58
98 3/16	96⅛	Treas 9¾pc Cv '88	97 1/16	.....	10.05	10.62
82	79	Transport 3pc '78-88	79	−⅛	3.80	9.15
96 13/16	94 13/16	Treas. 9½pc '88	95 13/16xd	.....	9.92	10.69
106⅛	100⅝	Treas 11½pc 1989	102 11/16	.....	11.19	10.71

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

Index-Linked

[illegible]

INT. BANK AND O'SEAS GOVT STERLING ISSUES

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH AND AFRICAN LOANS

[illegible]

LOANS

Building Societies

[illegible]

Public Board and Ind.

[illegible]

Financial

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

BANKS, HP & LEASING

[illegible]

Hire Purchase, Leasing, etc.

[illegible]

BEERS, WINES & SPIRITS

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

CHEMICALS, PLASTICS

[illegible]

DRAPERY AND STORES

[illegible]

DRAPERY & STORES—Cont.

[illegible]

ELECTRICALS

[illegible]

ENGINEERING

[illegible]

ENGINEERING—Continued

[illegible]

FOOD, GROCERIES, ETC

[illegible]

HOTELS AND CATERERS

[illegible]

HOTELS—Continued

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

INDUSTRIALS—Continued

[illegible]

INSURANCES

[illegible]

LEISURE

[illegible]

LEISURE—Continued

[illegible]

MOTORS, AIRCRAFT TRADES

Motors and Cycles

[illegible]

Commercial Vehicles

[illegible]

Components

[illegible]

Garages and Distributors

[illegible]

NEWSPAPERS, PUBLISHERS

[illegible]

PAPER, PRINTING ADVERTISING

[illegible]

PROPERTY

[illegible]

PROPERTY—Continued

[illegible]

SHIPPING

[illegible]

SHOES AND LEATHER

[illegible]

SOUTH AFRICANS

[illegible]

TEXTILES

[illegible]

TOBACCOS

[illegible]

TRUSTS, FINANCE, LAND

Investment Trusts

[illegible]

INVESTMENT TRUSTS—Cont.

[illegible]

Finance, Land, etc

[illegible]

OIL AND GAS

[illegible]

OIL AND GAS—Continued

[illegible]

OVERSEAS TRADERS

[illegible]

PLANTATIONS

Rubbers, Palm Oil

[illegible]

Teas

[illegible]

MINES

Central Rand

[illegible]

Eastern Rand

[illegible]

Far West Rand

[illegible]

O.F.S.

[illegible]

Finance

[illegible]

Diamond and Platinum

[illegible]

Central African

[illegible]

MINES—Continued

Australians

[illegible]

Tins

[illegible]

Miscellaneous

High	Low	Stock	Price	+/-	Div Net	C'vr	Y'ld Gr's
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
175	135	♥Colby Res Corp.	145	+5	—	—	—
955	740	Cons. Murch. 10c	902	+20	100c	1.4	6.5
£20	£15	Eastern Trns. Cns. 50c	£20	+¼	Q95c	4.9	2.1
625	550	♥Echo Bay Mines	587	−13	—	—	—
252	203	Hampton Areas 10p	245	−2	3.75	2.1	2.1
205	170	♥Highwood Res	185	+10	—	—	—
£24½	£19⅝	Homestake Mining $1	£22½	+¼	Q20c	—	0.7
365	275	Northgate C$1	330	−5	—	—	—
718	593	RTZ	653	−7	18.0	φ2.6	4.0
£155½	£130	Do. 9½pcLn '95-2000	£147	−1½	Q9½%	φ	f6.6
110	70	♥Sabina Inds C$1	80	......	—	—	—
£11¼	950	♥Tara Exptn $1	£10½	−⅛	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock".
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- φ Figures or report awaited.
- ♥ Not officially UK listed; dealings permitted under Rule 163(4)(a)
- ✝ USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- †† Dealt in under Rule 163(3).
- § Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- ♦ Merger bid or reorganisation in progress.
- ♦ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ☆ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ‖ No par value.

B.Fr. Belgian Francs. Fr. French Francs. ƒƒ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other offer estimate. c Cents. d Dividend rate paid or payable on part of capital, cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend, cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend; cover based on previous year's earnings. v Subject to local tax. x Dividend cover in excess of 100 times. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1983-84. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1984. K Figures based on prospectus or official estimates for 1984. M Dividend and yield based on propectus or other official estimates for 1983. N Dividend and yield based on prospectus or other official estimates for 1985. P Figures based on prospectus or other official estimates for 1983. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

REGIONAL & IRISH STOCKS

The following is a selection of Regional and Irish stocks, the latter being quoted in Irish currency.

			Fin. 13% 97/02	£92⅝	......
Albany Inv 20p	82	......	Alliance Gas	70	......
Craig & Rose £1	900	......	Arnott	220	......
Finlay Pkg. 5p	54	......	CPI Hldgs.	82	......
Higsons Brew	103	......	Carrol Inds.	118	−2
Holt (Jos) 25p	880	......	Hall (R. & H.)	58xd	......
IoM Stm. £1	149	......	Heiton Hldgs.	18	......
IRISH			Irish Ropes	48	−2
			Jacob (W.& R.)	65	......
Exch. 12% 1985	£98¾xd	......	TMG	50	......
Nat. 9¾% 84/89	£87¼	−½	Unidare	75	......

OPTIONS — 3-month call rates

Industrials		Hawker Sidd	38	Vickers	14
Allied-Lyons	15	Hse of Fraser	26	Woolworth Hldg.	50
BOC Grp	27	ICI	42		
BSR	26	'Imps'	12	**Property**	
Babcock	17	ICL	7½	Brit Land	11
Barclays Bank	45	Ladbroke	23	Cap Counties	16
Beecham	32	Legal & Gen	45	Land Secs	25
Blue Circle	40	Lex Service	40	MEPC	25
Boots	16	Lloyds Bank	50	Peachey	17
Bowaters	25	'Lofs'	5	Samuel Props	12
Brit Aerospace	20	Lucas Inds	18	Sterling Guar.	4
BAT	15	'Mams'	14		
Brown (J.)	3	Marks & Spcr	20	**Oils**	
Burton Ord	22	Midland Bk	36		
Cadburys	11	NEI	10	Brist. Oil & Min	9
Comm Union	16	Nat West Bk	60	Brit Petroleum	35
Courtaulds	11	P & O Dfd	25	Burmah Oil	17
Debenhams	14	Plessey	20	Charterhall	9
Distillers	22	Racal Elect	18	Premier	6
Dunlop	5	RHM	8	Shell	55
FNFC	6¼	Rank Org Ord	24	Tricentrol	20
Gen Accident	42	Reed Intnl	40	Ultramar	60
Gen Electric	16	Sears	8		
Glaxo	70	TI	22	**Mines**	
Grand Met	30	Tesco	16	Charter Cons	24
GUS 'A'	55	Thorn EMI	55	Cons Gold	58
Guardian	50	Trust Houses	18	Lonrho	12
GKN	20	Turner Newall	10	Rio T Zinc	60
Hanson Tst.	17	Unilever	75		

A selection of Options traded is given on the London Stock Exchange Report page.

"Recent Issues" and "Rights" Page 37

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £700 per annum for each security.

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

INSURANCES

Insurances—continued

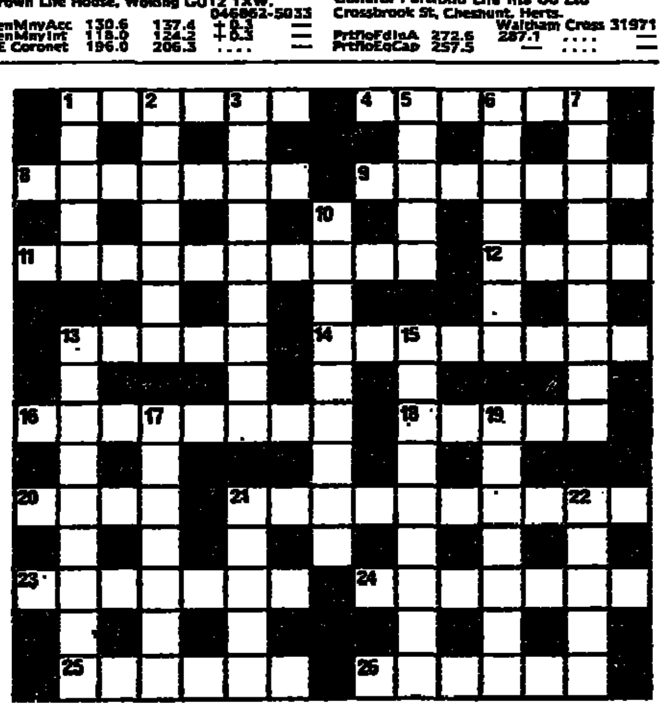
IntnlManFd	266.7	280.7	−1.0	—
JapPnFdAc	160.4	168.8	+0.2	—
AmPnFdAc	114.3	120.3	−0.2	—
Property	240.3	252.9	+0.3	—
MgIIntPnAc	555.6	584.8	−1.5	—
Colonial Mutual Group				
24 Ludgate Hill EC4P 4BD.			01-248 9861	
Capital Life Assurance				
KeyInvFd	—	129.75	....	—
PcmkrInvFd	—	132.4	....	—
Equity Fd	124.94	131.52	....	—
Intl Eq	133.6	140.7	....	—
Fxd Int Fd	111.09	116.93	....	—
Propty Fd	106.09	116.62	....	—
Cash Fd	102.26	107.64	....	—
ManagdFd	125.48	132.09	....	—
Col Mut Life (Pension Annuities)				
ManCpA/B	114.96	121.03	....	—
ManInvA/B	115.89	122.00	....	—
Commercial Union Group				
St Helens. 1 Undershaft. EC3.			01-283 7500	
VarAnnAcUts	—	170.23	....	—
VarAnnApr27	—	36.43	....	—
Prime Series—Life				

Offshore & Overseas—continued

Money Market Trust Funds

Money Market Bank Accounts

F.T. CROSSWORD PUZZLE No. 5,400



ACROSS

1 & 4 Poet's leading principle almost to settle for a town (6, 6)

8 Where some kickers put the ball, keeping up with things (2, 5)

9 Bill's character can include a politician (7)

11 Seek Eastern cache in secret last course? (10)

12 Sense (not with head) expression of pain (4)

13 Stone broken for an attack (7)

14 The old could be doing P.E. with credit (8)

16 Pronounce aitches e.g. like Hook? (8)

18 Dishonest way of resting (5)

20 The burden concerning America? (4)

21 She could get such a fee with fun mainly getting around (10)

23 Beat rotter in French church (7)

24 Jeers at path within Education Department (7)

25 & 15 down Midland town with London borough about ancient region (6, 9)

26 Announcement: opening coming (6)

DOWN

1 & 13 Long time not observed on the calendar (5, 2, 7)

2 Shocking line—SOS. There's something out of the zoo! (7)

3 It could be in Albert Hall before artist takes in box (9)

5 Delete periods of time at end of game (5)

6 Harmful omen is nothing when unreliable (7)

7 Hunting for scorch feature on top of grate (9)

10 It could be part of the cycle (9)

13 See 1 down.

15 See 25 across.

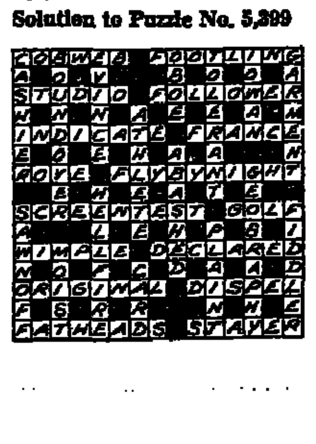
17 Examine hotels worked on by beak (it is said) (7)

19 Put 'em in one site, collected together—make a list (7)

21 Chocolate source (5).

22 Enclose in street, exhausted (5)

Solution to Puzzle No. 5,399



INSURANCE & OVERSEAS MANAGED FUNDS

Barclays Life Ass.—Cont.

Income Accum	135.1	142.3	0.3
Do Initial	129.5	136.4	0.3
Universal Tst. Acc	89.9	94.7	+0.2
Do Initial	88.8	93.5	+0.2
Man Pens. Accum	272.0	286.4	-1.4
Do Initial	220.7	232.4	-1.3
Gilt-Edg Pens. Accum	221.3	233.0	-0.5
Do Initial	172.9	187.9	-0.6
Money Pens. Accum	195.9	206.3	+0.3
Do. Initial	154.9	163.1	+0.2

Black Horse Life Ass. Co. Ltd.
71, Lombard St., EC3 01-623 1288

Black Horse Man. Fd		259.71		—
Managed Inv Fd	173.99	183.15		—
Property Fd	154.00	162.11		—
Fixed Interest Fd	151.41	159.38		—
Cash Fd	138.81	146.12		—
Income Fd	200.96	211.54		—
Extra Income Fd	189.93	199.93		—
Worldwide Growth Fd	228.65	240.69		—
Balanced Fd	201.20	211.79		—
Smlr Co's & Recv. Fd	230.27	242.39		—
Int. Technology Fd	264.05	277.95		—
Nth. Amer. & Gen. Fd	146.34	154.05		—
Energy Int. Fd	111.19	117.05		—
Pacific Basin Fund	164.81	173.49		—

British National Life Assurance Co. Ltd.
Harlands Rd, Haywards Heath. 0444 414111

Managed	122.5	128.9		—
Property	127.2	133.9		—
Equity	133.5	140.5		—
International	136.2	143.4		—
Fixed Interest	106.9	112.5		—
Deposit	102.2	107.6		—
Managed Pen. Cap.	122.4	128.8		—
Property Pens. Cap.	129.1	135.9		—
Equity Pens. Cap.	128.3	135.1		—
Intnl. Pens. Cap.	141.9	148.5		—
Fixed Int. Pens. Cap.	101.9	107.3		—
Deposit Pens. Cap.	98.6	103.8		—

Canada Life Group
2-6, High St., Potters Bar, Herts. P. Bar 51122

Equity Gth March 1		103.6		—
Retmt. Fed. April 6	296.3	+21.1		—
Managed Pen Fund	198.2	208.7		—
Property Pen Fund	116.0	122.1		—
Index Lnkd Pen Fund	111.5	117.8		—
Managed	129.6	136.5	-0.4	—
Property	106.8	112.5		—
Gilt and Fixed Interest	108.5	114.3		—
Index-Linked	96.9	102.0	-0.3	—
Equity	131.8	138.8	-0.7	—
Cash	107.9	113.6	+0.2	—
Midland Bk. Unit Tst.	129.9	136.8	-0.1	—
Midland Bank Intnl.	150.0	157.9	-0.3	—

Cannon Assurance Ltd.
1 Olympic Way, Wembley HA9 0NB. 01-902 8876

Equity Units	£43.07	—	+0.06	—
Property Units	£17.59	—		—
Equity Bond/Exec	£27.80	29.42	+0.04	—
Prop. Bond/Exec	£22.99	24.33		—
Bal. Bd./Exec/Unit	£24.55	25.98	-0.02	—
2nd Equity Acc.	215.9	228.5	+0.4	—
2nd High Inc/Acc	179.8	190.3	+0.8	—
2nd Property Acc.	175.0	185.2		—
2nd Managed Acc.	177.6	187.9	-0.1	—
2nd Deposit Acc	148.3	156.9		—
2nd Gilt Acc	146.6	155.1	-0.5	—
2nd American Acc.	164.5	174.1	-0.8	—
2nd Intl Money Acc.	148.8	157.5	-0.1	—
2nd Index Acc.	98.1	103.8	-0.4	—
2nd Far East Acc	110.7	117.1	-0.1	—
2nd Eq. Pens./Acc.	310.8	328.9	+0.5	—
2nd Hi Inc Pens/Acc	193.6	204.9	+2.0	—
2nd Prp. Pens/Acc	225.9	239.0		—
2nd Mgd. Pens/Acc	230.7	244.1	-0.2	—
2nd Dep. Pens/Acc	197.8	209.3		—
Gilt Pens/Acc	192.2	203.4	-0.5	—
2nd Am. Pens/Acc	226.9	240.1	-1.1	—
2nd Int. MoneyPens/Acc	184.8	195.6	-0.1	—
2nd Index Pens./Acc.	104.6	110.7	-0.4	—
2nd Far East Pens/Acc.	112.7	119.3	-0.1	—
L & E S.I.F.	77.5	82.0		—
L & E S.I.F. 2	52.0	55.5		—

Current value at April 19.

Capital Life Assurance
Continued on adjacent Page

Chieftain Assurance Funds.
11 New Street, EC2M 4TP. 01-283 3933

Managed Growth	212.74	223.93	+0.42	—
Managed Income	101.87	107.23	-0.59	—
International	144.68	152.30	+0.46	—
High Income	126.54	133.23	-0.83	—
Income & Growth	137.17	144.38	-0.79	—
Basic Resources	149.69	156.52	+0.60	—
American	160.06	169.16	+0.39	—
Far Eastern (z)	217.69	229.15	-1.79	—
Smaller Cos	143.53	151.08	+0.37	—

City of Westminster Assurance
Sentry House, 500, Avebury Boulevard,
Central Milton Keynes MK9 2LA. 0908-606101

G.T. Management Ltd.
16 Finsbury Circus, Lond EC2M 7DJ 01-628 8131

G.T. Plan Bond Fund	127.7	134.5	-0.2	
GT Pln High Yld Fnd	136.8	144.0	-0.5	
GT Plan Far East Fnd	136.3	143.5	-2.2	
GT Plan N. Am Fd	119.7	125.4		
GT Pln UK&G.E. Fnd	158.9	167.3	-0.6	
GT Pln Wrldwde Fnd	151.3	159.3	+0.2	
GT Pension Bnd Fnd	139.6	147.0	-0.2	
GT Pen High Yld Fd	158.6	167.0	-0.6	
GT Pen Far East Fd	172.0	181.1	-2.9	—
GT Pen N. Am. Fd	171.1	180.2	+0.7	—
GT Pen UK & G.E. Fd	185.9	195.7	-0.7	—
GT Pen Worldwide Fd	162.0	170.6	+0.2	—

Prices for Accum. Units only.

Assicurazioni GENERALI S.p.A.
117, Fenchurch St., EC3M 5DY. 01-488 0733

Intl. Managed Bond	173.6	182.8		—

General Portfolio Life Ins. PLC
Crossbrook St., Cheshunt, Herts. Waltham X 31971

Portfolio Fd. Acc.		272.7		—
Portfolio Fd. Init.		220.6		—

Continued on adjacent Page

Gresham Unit Ass. Ltd.
2-6, Prince of Wales Rd. B'mouth. 0202 767655

Managed Fd.	288.2	303.7		—
Money Fd.	159.1	167.4		—
Equity Fd.	245.0	258.2		—
Fixed Int. Fd.	120.7	127.2		—
Property Fd.	176.2	185.7		—
Managed Pen. Fd.	282.6	297.8	+0.8	—
Equity Pension Fd.	182.0	191.8	+0.5	—
Fixed Int. Pen. Fd.	171.1	180.3	-0.6	—
High Yield Pen. Fd.	168.6	177.7	-0.5	—
Money Pension Fd.	133.3	140.3	+0.2	—
Property Pension Fd.	129.9	136.9		—

Gresham/Framlington

American & Gen. Fd.	226.3	238.5	-0.3	—
Income Fd	220.2	232.0	+0.5	—
Int'l. Growth Fd	268.5	282.9	-0.9	—
Capital Fund	228.3	240.6	+0.3	—
Recovery Fund	167.1	176.1	-0.7	—
Japan & Gen Fd	103.5	109.1	-0.8	—

Growth & Sec. Life Ass. Soc. Ltd.
48, London Fruit Exchange, E1 6EU 01-377 1122

Flexible Finance	£1.596	—		—
Landbank Secs.	£0.6674	—		—
Landbank Secs. Acc.	189.2	194.1		—
G. & S. Super Fd.	£11.5990			—

Guardian Royal Exchange
Royal Exchange, EC3. 01-283 7101

Guardian Assurance

Property Bonds	313.5	326.5		—

GRE Linked Assurance Ltd.

Managed Initial	232.9	245.2	-0.8	—
Do. Accum	261.6	275.4	-0.8	—
Equity Initial	301.9	317.8	-1.5	—
Do. Accum	339.1	356.9	-1.6	—
Fixed Int. Initial	196.2	206.6	-0.7	—
Do. Accum.	220.4	232.0	-0.8	—
Intnl. Initial	217.0	228.4	-2.1	—
Do. Accum	243.7	256.5	-2.3	—
North American Initial	94.2	99.1	-0.8	—
Do. Accum	96.3	101.3	-0.8	—
Pacific Initial	116.0	122.2	+0.3	—
Do. Accum	117.5	123.7	+0.3	—
Index-Linked Gilt Init.	91.9	96.7	-0.2	—
Do Accum	93.9	98.8	-0.2	—
Property Initial	123.5	130.0		—
Do Accum	138.5	145.8		—
Deposit Initial	124.6	131.2		—
Deposit Accum.	140.0	147.4	+0.1	—

GRE Pensions Management Ltd.

Pens. Managed Initial	234.9	247.3	-1.6	—
Pens. Managed Acc.	257.9	271.5	-1.8	—
Pens. Equity Initial	326.0	343.2	-3.0	—
Pens. Equity Acc.	357.9	376.7	-3.2	—
Pens. Fxd. Int. Initial	205.1	215.9	-0.7	—
Pens. Fixed Int. Acc.	225.1	237.0	-0.7	—
Pens. Int'l Initial	213.5	224.8	-1.9	—
Pens. Int'l. Acc.	234.4	246.8	-2.0	—

Continued on adjacent Page

Hambro Life Assurance PLC
Allied Hambro Ctr, Swindon, SN1 1EL 0793 28291

Fixed Int. Dep. Acc.	190.5	200.6		—
Equity Acc.	437.7	460.8		—
Property Acc.	288.6	303.8		—
Managed Cap.	244.6	257.5		—
Managed Acc.	376.4	396.3		—
O'seas Earnings Acc.	289.2	304.5		—
Gilt Edged Acc.	216.6	228.0		—
American Equity Acc.	229.0	241.1		—
American Man Acc.	123.8	130.4		—
American Prop Acc.	108.7	114.5		—
Pen.F.I.Dep.Cap.	207.5	218.5	+0.9	—
Pen.F.I.Dep.Acc.	297.0	312.7	+0.6	—
Pen. Prop. Cap.	351.3	369.8	+0.1	—
Pen. Prop. Acc.	555.0	584.3	+0.6	—
Pen. Man. Cap.	455.6	479.6	-1.3	—
Pen. Man. Acc.	719.8	757.7	-1.4	—

COMMODITIES AND AGRICULTURE

Weather boosts potato price

By Richard Mooney

CONCERN ABOUT prospects for the coming UK harvest sent distant positions on the London potato futures market sharply higher yesterday.

The April 1984 position ended the day £9.50 up at £96 a tonne, while February 1984 finished £7.50 up at £81.50 a tonne.

Dealers said the rise was in response to the recent dry weather. Drought fears were beginning to affect traders thinking, they explained, following one of the driest Easters on record.

Some traders thought this reaction was somewhat premature, however. "This time last year the wet weather was driving prices upwards," said one. "The crop is mostly planted now and there is still plenty of time for the rain to come."

● New arrangements to support UK potato prices will be introduced without recourse to a producer poll, the Potato Marketing Board has announced.

Plans to replace the Government price guarantees with support-buying financed by an increased producer levy were announced by the PMB at the end of February. The Government guarantee, which has not been raised since 1977, offers no effective price support.

The new scheme would have had to have been put to a producer vote had 1,000 or more producers so demanded. But only 503 called for a vote.

This was described as "extremely encouraging," by Mr John Hoyles, chairman of the National Farmers' Union potatoes committee.

"We regard it as a vote of confidence by potato producers generally. All concerned must now work together to ensure that we give practical effect to the negotiated arrangements for the benefit of the potato industry as a whole."

Copper leads decline in metal market

BY JOHN EDWARDS, COMMODITIES EDITOR

COPPER and aluminium led a general decline in London metal markets yesterday, in spite of a downturn in the value of sterling against the dollar. In lacklustre trading conditions higher grade cash copper lost £16.25 to £1,084.5 a tonne, and cash aluminium £16.50 to £958. Cash zinc dropped by £14.25 to £704.5 a tonne and cash lead by £6.75 to £332 a tonne.

Traders said there was some disappointment that copper stocks held in the LME warehouses fell last week by only 2,925 to 280,200 tonnes.

Although this was the tenth successive weekly decline in stocks, the fall was considerably lower than some traders had been predicting. Aluminium stocks were down by only 675 to 182,250 tonnes. In addition the market was depressed by chartist selling encouraged by a report that aluminium production in the non-communist world rose again last month to 1,048,000 tonnes against 973,000 tonnes in February.

Zinc stocks were also only marginally lower, falling by 550 to 46,925 tonnes. The bids for the U.S. Mint buying tender for 10m lb of special high grade zinc were lower than expected and also depressed the market.

Lead stocks fell by 1,775 to 117,925 tonnes. However, the market was unsettled by a report that a compulsory conference, aimed at settling the stoppage at the Broken Hill mining complex, had been called for next Monday by the New South Wales Industrial Commission.

Tin prices reached the highest level for over a year, spurred on by further support-buying by the buffer stock of the International Tin Council and another decline in stocks. Warehouse holdings fell by 655 to 29,175 tonnes—the lowest level since March 1982.

LME silver holdings fell by 54,000 to 51,204,000 ounces, but nickel stocks rose by 438 to 30,480 tonnes.

Computer aid for milk

DAIRY FARMERS are being offered a computer system to help them cope with the milk production quota system recently introduced by the EEC.

Carlisle Computer Centre's (CCC's) Quota Management program is designed to aid farmers in management decisions they will have to take to ensure that their herds' performances will remain closely matched with the production limits they are allocated.

As operated in the UK the quota scheme will mean that most dairy farmers will face financial penalties if they allow their milk output to exceed their 1983 production minus 9 per cent.

CCC's program will help them to avoid the penalties by adjusting such factors as calving policy and feeding rations.

"Quota Management will provide the farmer with an immediate picture, graphically displayed on the computer screen, of his production pattern, compared to quota, over the following 18 months," CCC claims.

The program is initially available only for certain Apple computers but CCC intends to release programs compatible with a wider range of equipment.

● Milk production in England and Wales last month totalled 1.22bn litres, down 2.7 per cent from the March 1983 figure, according to Milk Marketing Board estimates.

Sales for liquid consumption were up 0.5 per cent at 532.4m litres leaving 687.1m litres, down 5.1 per cent, for manufacturing.

Moves to spice up pepper market

BY R. C. MURPHY IN BOMBAY

REPRESENTATIVES of leading pepper producing countries met in Kuala Lumpur yesterday under the auspices of the International Pepper Community to discuss a rise in the minimum export price of pepper.

Many countries consider the present floor price of 70 cents per pound, unrealistic in the context of world inflation and sharp increases in production costs. The ruling price is between 90 cents and $1.

The unity among pepper exporters is unusual. They have undercut each other in the past. The minimum export price was not adhered to and pepper was sold at even 40 cents a pound, till 1982 because of the glut and exporters' anxiety to sell as much as possible.

The present buoyancy of pepper prices is due to a setback to the Brazilian pepper crop, which fell to less than 20,000 tonnes in 1983 from the peak of 40,000 tonnes the previous year. As a result, world availability of pepper was less than 100,000 tonnes last year against more than 120,000 tonnes in 1982.

Pepper supply is unlikely to improve dramatically in 1984. India's production is projected to fall 17 per cent to around 28,000 tonnes this year, while no substantial gains are expected to Malaysia and Indonesia. But Brazil's crop is expected to be one-third higher at nearly 30,000 tonnes, weather permitting.

Demand for pepper is rising. Consumer stocks in Europe and the U.S. were down to historically low levels. The boost to demand comes mainly from the manufacturing sector of the food industry; the growth in convenience foods is providing an expanding market for pepper and other spices.

Indian producers ordered to sell 70% of bulk teas through auction

BY JOHN ELLIOTT IN NEW DELHI

THE Indian Government has stepped up its attempts to bring sales and pricing of tea under control by introducing a Parliamentary order requiring all tea producers to sell a minimum of 70 per cent of their bulk teas through public auctions.

All manufacturers, auction organisers and brokers must obtain a licence once the order comes into force in three months' time. It will cover the main tea areas of Assam, West Bengal, Tamil Nadu and Kerala.

This is the latest of a series of measures introduced by the Indian Government in the past few months to control the tea industry, and especially to stop growers agreeing domestic and foreign sales from their gardens at bogus prices. Officials have evidence of ex-garden sales prices rising sharply, with the amounts being entered in invoices at lower levels to cut taxes and other official levies. The amount of tea sold direct from gardens has also been rising.

The Government estimates that up to 50 per cent of tea sales are arranged through auctions and that this will rise to 70 per cent as a result of the order.

The Government started tightening up its control of the tea industry after it introduced its ban on CTC (crush, tear and curl) tea exports last Christmas in an attempt to curtail domestic price rises. That ban is expected to be lifted in May although no final decision has yet been taken.

At the end of February the Government announced a registration system for all bulk teas sold for export outside Indian auction rooms. The latest announcement is aimed similarly at bulk teas for domestic use.

Tea units in non-traditional states and those below 160 hectares processing tea in their own manufacturing units are exempt from the order. Tea marketed directly by manufacturers in consumer packs approved by the Tea Board, instant tea, tea bags, aromatic tea and green tea are also to be exempt from the order.

The Tea Board has been reconstituted for a further three years till March 1987 with 23 members. The present chairman, Mr Jagdish Khattar, will continue in his post.

● There was no tea auction in London yesterday due to the Easter holiday.

U.S. maize stocks higher than expected

BY NANCY DUNNE IN WASHINGTON

AN eagerly-awaited report released Monday by the U.S. Department of Agriculture indicated that there is more maize in stocks than traders had expected, and less soyabeans.

The stocks report, normally not a critical one, was of particular interest this year due to tight supplies resulting from last year's drought and payment-in-kind programme and earlier crop reports issued by the USDA. It estimates U.S. grain supplies through the end of the 1983-84 crop year.

The department estimated soyabean stocks on April 1 at 753m bushels, down 28 per cent from last year. Market forecasts had ranged from 759m to 820m bushels, so the estimate was expected to produce a bullish trend.

Although maize stocks were estimated 48 per cent lower than last year, 3.26bn bushels, the figures were no surprise. Market predictions had ranged from 3.025bn bushels to 3.298bn bushels. An estimate above 3.2bn bushels was expected to produce a bearish response.

Wheat stock estimates totalled 1.75bn bushels, only 7 per cent less than last year's record high of 1.88bn bushels, and 13 per cent more than in April 1982. Wheat use declined in the first quarter of the year to 574m bushels from 644m last year, a reflection of declining exports.

In early dealings on the Chicago Board of Trade, soyabean prices opened higher, especially in the nearby months, while maize and wheat values were lower.

Meanwhile it was confirmed that the Chicago Board of Trade, faced with a difficult choice for agriculture options, has decided to trade maize futures rather than wheat.

Under the new Commodity Futures Trading Commission programme, due to start next autumn, each exchange is allowed to offer options on two agricultural commodities. The CBT has already submitted an application to trade options on soyabeans, a favoured market because of its volatility.

For its second contract the exchange was forced to choose between its two oldest and largest grain markets. Maize, because it is in relatively short supply, is expected to be the more active contract this year.

Wheat options are likely to be traded when the programme begins on the Kansas City, Minneapolis and mid-American exchanges.

Surge in cocoa price continues

LONDON COCOA futures prices continued their pre-Easter upsurge when the market re-opened yesterday.

New York trading on Monday had indicated a rise of £15 or so for London values, but this level was quickly left behind as fresh buying took nearby prices the £40 permissible limit higher in morning trading.

Further gains were made when trading resumed following the mandatory 15-minute break and the July quotation ended the day £48 up at £1,894 a tonne.

Dealers attributed the rise to a general reassessment of the likely end-season production deficit, now put at least at 100,000 tonnes because of a lower than expected Brazilian harvest and better than expected bean grindings in leading consuming countries.

● Brazilian soyabean crop for 1983-84 is now estimated at 15.15m tonnes, compared with 14.57m last season. The estimate by the Agriculture Ministry's production financing company (CFP) is slightly down from the previous forecast of 15.26m tonnes because of lower yields in the main producing state of Rio Grande do Sul.

● Stocks of grain held on farms in England and Wales at end February were well above last year according to estimates released yesterday by the Ministry of Agriculture statistical service.

Wheat stocks jumped to 3,040,000 tonnes against 2,190,000 at the same time a year ago. Barley stocks were only marginally higher at 1,590,000 (1,500,000) tonnes and oats lower at 80,000 (140,000) tonnes but total holdings were 4710,000 (3,820,000) tonnes.

● Argentin's linseed output in the 1983-84 December/November crop year is expected to fall to 660,000 tonnes, down from 680,000 forecast previously and 730,000 tonnes in 1982-83.

PRICE CHANGES

In tonnes unless stated otherwise	Apr. 24 1984	+ or —	Month ago
Metals			
Aluminium	£1100		£1100
Free Mkt	$1410/1440		$1465/495
Copper			
Cash h Grade	£1084.5	—16.25	£1072
3 mths	£1102.25	—14.0	£1087.75
Cash Cathode	£1084	—16.5	£1070
3 mths	£1095.5	—12.75	£1084
Gold troy oz.	$383.75	—1.25	$389
Lead Cash	£332	—6.75	£330
3 mths	£340.5	—5.75	£334.75
Nickel	£4896		£4836
Free Mkt	217/237c		216/235c
Palladium oz.	$162.50	+2.75	$162.25
Platinum oz.	£285.40	+9.2	£270.35
Quick silver†	$315/318		$305/310
Silver troy oz.	660.65p	+4.20	655.65p
3 mths	674.50p	+5.15	669.55p
Tin cash	£8877.5	+5.5	£8439.5
3 months	£8879.	+71.5	£8563.5
Tungsten	$83.51		$76.35
Wolfram22,04lb	$84/88		$86/90
Zinc	£704.5	—14.25	£745
3mths	£692.5	—14.25	£716.5
Producers	$1050/1090		$1050/1088

	Apr. 24 1984	+ or —	Month ago
Oils			
Coconut (Phil)	$1175v	+5	$1185
Groundnut	‡		$1135
Linseed Crude	‡		‡
Palm Malayan	‡		$750
Seeds			
Copra Phil	‡		$760
Soyabean(U.S.)	$327.75v	+11.75	$328.5
Grains			
Barley Fut.Sep.	£106.90	—0.05	£106.90
Maize	£148.75		£147.50
Wheat Fut.Jly.	£129.86	+0.55	£128.60
No2 Hard Wint	‡		‡
Other commodities			
Cocoa ship't*	£1959	+82.0	£1848
Futures Jly	£1894	+48.0	£1792
Coffee Ft. Jly	£2074.5	—3.5	£2013
Cotton A index	89.30	+0.85	88.45c
Gas Oil May	$243.50		$247.25
Rubber (kilo)	74.5p	—1.0	76p
Sugar (raw)	£111·50	—1.5	£116.5
Woolt'ps 64s	470p kilo		466pkil

‡ Unquoted. v May. z June. v April-May. w May-June. † Per 75 lb flask. * Ghana cocoa. n Nominal. c Cents per pound.

LONDON OIL

After yesterdays strong close in New York London was due to open $2-3 higher. However, the stronger dollar discouraged any trade buying and the market drifted back to close unchanged, reports Premier Man.

SPOT PRICES

	Latest	Change + or —
CRUDE OIL—FOB ($ per barrel)		
Arabian Light	28.30-28.45	—0.03
Iranian Light	27.80-27.85	—0.05
Arab Heavy	26.90-26.95	—
North Sea (Forties)	29.85-29.90	—0.03
North Sea (Brent)	27.75-30.00	—0.03
African BonnyLi'ht	30.05	—0.03

PRODUCTS—North West Europe ($ per tonne)

Premium gasoline	274-278	—
Gas Oil	247-251	—0.5
Heavy fuel oil	181-186	—

GAS OIL FUTURES

Month	Yest'day's close	+ or —	Business Done
	$ U.S. per tonne		
April	246.50	—1.00	248.00-246.5
May	243.50	—	244.75-243.5
June	243.75	+1.25	244.00-242.8
July	243.00	+0.50	245.50-242.5
Aug.	245.75	+0.75	245.75-249.2
Sept.	246.00	+0.50	246.00-247.5
Oct.	249.25	—	250.00-249.2
Nov.	251.25	—0.25	252.00-252.8
Dec.	253.50	—	255.50-253.5

Turnover: 1,405 (920) lots of 100 tonnes.

GOLD MARKETS

Gold fell $1¼ an ounce from Thursday's close in the London bullion market yesterday to finish at $383¼-$384. The metal opened at $385¼-$386 and traded between a high of $385¼-$386 and a low of $383-$383¼. A smaller than expected rise in U.S. consumer prices prompted some selling after the start of trading in New York.

In Frankfurt the 12½ kilo was fixed at DM 33,170 per kilo ($385.50 per ounce) from DM 32,895 ($386.00) and closed at $383-$383½ from $385-$385½.

In Luxembourg the dollar per ounce equivalent of the 12½ kilo bar was unchanged at $385.00.

In Paris the 12½ kilo bar was fixed at FFr 101,500 per kilo ($383.71 per ounce) in the afternoon compared with FFr 101,500 ($383.75) in the morning and FFr 100,750 ($384.26).

In Zurich gold closed at $383¼-$383¾ from $384¼-$385¼.

LONDON FUTURES

Month	Yest'days close	+ or —	Business Done
	$ per troy ounce		
April	—	—	—
June	387.50-87.70	—1.35	390.10-87.40
Aug	394.30-95.00	—1.45	—
Oct	401.80-02.00	—1.50	—
Dec	408.00-09.00	—1.60	—
Feb.	414.80-18.00	—1.70	—

Turnover: 38 (400) lots of 100 troy ounces.

	Apr. 24		Apr. 19	
Gold Bullion (fine ounce)				
Close	$383½-384	(£272¼-272¾)	$384¾-385¼	(£271¼-271¾)
Opening	$385¼-385¾	(£272-272½)	$384¼-384¾	(£271-271½)
Morning fixing	$384.50	(£271.706)	$385.00	(£271.241)
Afternoon fixing	$383.25	(£270.944)	$384.90	(£270.715)

Gold and Platinum Coins Apr. 24

Krugrnd	$385-386¼	(£273-273¾)	King Sov	$94½-96	(£67-68)
½ Krug.	$204-204¾	(£144½-145¼)	Victoria Sov	$94½-96	(£67-68)
¼ Krug.	$104-104¾	(£73¼-74¼)	French 20s	$76.3-82.9	(£54-58¼)
1/10 Krug.	$42½-43¼	(£30¼-30¾)	50 Pesos Mex	$471.6-478.2	(£334¼-339)
Mapleleaf	$385¼-386	(£273¼-273¾)	100 Cor Aust	$371.1-377	(£263-267¼)
New Sov.	$90¼-91	(£64-64½)	$20 Eagles	$620-640	(£439½-453¾)
½ New Sov.	$54¼-55	(£38½-39)	Noble (Plat.)	$418.55-419.10	(£295¼-296½)

EUROPEAN MARKETS

ROTTERDAM, April 24.

Wheat — (U.S. $ per tonne): U.S. Two Soft Red Winter: May 171, mid-June/mid-July 155, Aug 153. U.S. Two Northern Spring 14 per cent protein: May 186, June 184, July 182.50, Aug 179, Sept 177, Oct 178.50, Nov 180. U.S. Three Hard Amber Durum: April/May 190, May 15/June 15 189, June 186, July 184.25, Aug 182.50, Sept 180.50, Oct 182.50, Nov 184. Canadian One Western Amber Durum: April/May 198, June 202, Nov 199. Canadian Two Western Amber Durum: April/May 194.

Soyabeans—(U.S. $ per tonne): U.S. Two Yellow Gulfports: May 321.75, June 323.50, July 325.50, Aug 326, Sept 315, Oct 288.50, Nov 288.50, Dec 291.25, Jan 286.25, Feb 289.75 sellers.

Soyameal—(U.S. $ per tonne): 44 per cent; afloat 224, April 224, May 225, June 228, April/Sept 229, May/Sept 228.50, Oct 232, Nov/March 234, sellers. Pellets Brazil: Afloat 234, April 235, May 228.50, May/Sept 235.50, Oct/Dec 245, sellers. Pellets Argentine: Afloat 231.50, May 227.50, May/Sept 227.50, May/Oct 227.50, sellers.

Maize—(U.S. $ per tonne): U.S. Three Yellow: April 166.50, May 164, June 164, July/Sept 163.50, Oct/Dec 143, sellers. Argentine Plate: Afloat 168, April 165, May 166, June 165, July 165, sellers.

BRITISH COMMODITY PRICES

BASE METALS

BASE-METAL PRICES were easier on the London Metal Exchange despite the downturn in sterling against the dollar. Copper lost ground and retreated to £1,103, after £1,101.5 following the smaller-than-expected stocks decline and a poor opening on Comex. Lead and Zinc were similarly depressed and closed at £340.5 and £692.5 respectively, the latter following an unexciting response to the U.S. Mint tender. Trade and chartist selling lowered Aluminium to £974 before a close of £967.5, while Nickel was finally £3,540. Buffer stock support and currency considerations boosted Tin to a closing level of £8,890.

COPPER

Amalgamated Metal Trading reported that in the morning cash Higher Grade traded at £1,090, 90.5, three months £1,110, 09, 08, 07, 06, 06.50, 07. Cathodes: Three months £1,101. Kerb: Higher Grade: Three months £1,107, 06, 06.5. Afternoon: Higher Grade: Three months £1,103, 04, 03.50, 02, 01.50, 01, 01.5, 02, 02.5. Kerb: Higher Grade: Three months £1,104, 03, 02, 03, 03.5, 03, 02.5, 03. Turnover: 21,900 tonnes. U.S. Producers: 74-78 cents per pound.

COPPER	a.m. Official	+ or —	p.m. Unofficial	+ or —†
HighGrde	£	£	£	£
Cash	1090-.5	—19.7	1084-5	—16.7
3 months	1107-.5	—8	1102-.5	—14
Settlem't	1090.5	—11	—	
Cathodes				
Cash	1089.5-90.5	—18.7	1083-5	—16.5
3 months	1100-1	—7.75	1095-6	—12.5
Settlem't	1090.5	—10.5	—	

TIN

Tin—Morning: Standard: Cash £8,865, three months £8,850, 60, 55, 50, 51, 50, 48, 45. High Grade: Three months £8,900. Kerb: Standard: Three months £8,850. Afternoon: Standard: Three months £8,865, 70, 75, 80. High Grade: Cash £8,925, 20, 15. Kerb: Standard: Three months £8,875, 80, 85, 90. Turnover: 4,675 tonnes.

TIN	a.m. Official	+ or —	p.m. Unofficial	+ or —†
High Grde	£	£	£	£
Cash	8895-900	+22.5	8915-20	+42.5
3 months	8900-1	+40	8915-20	+67
Settlem't	8900	+20	—	
Standard				
Cash	8850-5	+30	8875-80	+55
3 months	8845-6	+30	8875-80	+71.5
Settlem't	8855	+35	—	
Straits E	$29.16		—	

LEAD

Lead—Morning: Cash £337, 36, 36.5, three months £344, 44.5, 44. Kerb: Three months £343. Afternoon: Three months £344, 43.5, 44, 43, 42.5, 42, 41.5, 40. Kerb: Three months £341, 42, 41, 40, 40.5. Turnover: 13,150 tonnes. U.S. Spot: 26-28 cents per pound.

LEAD	a.m. Official	+ or —	p.m. Unofficial	+ or —†
	£	£	£	£
Cash	336-.25	—2.85	331.5-2.5	—6.75
3 months	343.5-4	—2.37	340-1	—5.75
Settlem't	336.25	—2.75	—	

ZINC

Zinc—Morning: Cash £707, 08, three months £695, 96, 97, 95.5, 95, 95.5. Kerb: Three months £696, 95. Afternoon: Three months £694, 95, 94, 93, 92.5, 93, 92. Kerb: Three months £693, 92.5, 92, 92.5. Turnover: 12,750 tonnes. U.S. Prime Western: 53-53.75 cents per pound.

ZINC	a.m. Official	+ or —	p.m. Unofficial	+ or —†
	£	£	£	£
Cash	708-9	—10½	704-5	—14¼
3 months	695.5-6	—11	692-3	—14¼
Settlem't	709	—10	—	

ALUMINIUM

Aluminium—Morning: Three months £980, 81, 80, 79, 78.5, 78, 77.5, 77, 76.5, 76, 75, 75.5. Kerb: Three months £875, 76. Afternoon: Three months £975.5, 76, 76.5, 77, 79, 80, 79.5, 79. Kerb: Three months £978, 77, 77.5, 77. Turnover: 22,075 tonnes.

Alumin'm	a.m. Official	+ or —	p.m. Unofficial	+ or —†
	£	£	£	£
Spot	964.5-5.5	—19.5	957.5-958.5	—16.5
3 months	975-.5	—18¼	978.5-9	—14¼

NICKEL

Nickel — Morning: Three months £3,525, 31. Kerb: Three months £3,520. Afternoon: Three months £3,525, 29, 35. Kerb: Three months £3,536, 40. Turnover: 432 tonnes.

NICKEL	a.m. Official	+ or —	p.m. Unofficial	+ or —†
Spot	3450-5	—12.5	3453-8	—6.5
3 months	3538-1	—4.5	3535-5	—1

SILVER

Silver was fixed 4.2p an ounce higher for spot delivery in the London bullion market yesterday at 660.65p. U.S. equivalents of the fixing levels were: spot $9.346, up 2.3c; three-month $9.596, up 3.6c; six-month $9.868, up 4c; and 12-month $10.426, up 4.4c. The metal opened at 665½-668½p ($9.42-9.45) and closed at 662½-665½p ($9.33-9.36).

SILVER per troy	Bullion fixing price	+ or —	L.M.E. p.m. Unoffial	+ or —
Spot	660.65p	+4.20	662.5p	+8
3 months	674.50p	+5.15	676.75p	+5
6 months	689.80p	+5.40	—	
12months	720.20p	+5.80	—	

LME—Silver (2,000 oz contract): Cash 662.5p (658.5p); three months 676.75p (671.75p). Turnover 0 (3).

Turnover: 53 (98) lots of 10,000 ozs. Morning: Large three months 676.3, 76. Kerb: Three months (large) 676. Afternoon: Large three months 675, 74.5, 77, 76.5. Kerb: Large three months 677.

COCOA

Futures opened steadier than the dues and forged ahead in active trading to move through limit up and hold the gains to a firm close. Physicals failed to excite the same interest and only light business was noted, reports Gill and Duffus.

COCOA	Yesterday's Close	+ or —	Business Done
	£ per tonne		
May	1882-83	+51.5	1884-55
July	1893-95	+48.0	1898-60
Sept	1885-86	+56.0	1896-48
Dec	1809-10	+42.5	1815-85
March	1790-92	+35.0	1794-74
May	1770-85	+22.5	1778
July	1780-90	+15.0	1790

Sales: 7,279 (5,889) lots of 10 tonnes.

ICCO indicator prices (U.S. cents per pound). Daily prices for April 19: 116.33 (113.97); five-day average for April 20: 114.46 (113.79).

COFFEE

In thin conditions prices remained fixed in a tight range during a featureless session, reports Drexel Burnham Lambert. Differentials tended to narrow slightly as prices weakened before a steadier New York and lower sterling encouraged a recovery from the daily lows in most contracts.

COFFEE	Yesterd'ys Close	+ or —	Business Done
May	2079-80	—14.5	2092-79
July	2074-75	—03.5	2082-68
Sept	2054-56	+02.5	2058-47
Dec	2034-35	—01.5	2043-28
January	1989-00	+04.5	2003-91
March	1938-39	+11.0	1936-30
May	1902-05	+14.0	1903-96

Sales: 2,346 (2,898) lots of 5 tonnes.

ICO Indicator prices (U.S. cents per pound) fob April 23: Comp daily 1979 144.46 (144.47): 15-day average 143.97 (144.00).

GRAINS

Business done—Wheat: May 128.15-7.80, July 130.00-9.65, Sept 108.90-8.80, Nov 116.00 only, Jan 114.90 only, March 117.80-7.70. Sales: 80 lots of 100 tonnes. Barley: May 121.00-9.80, Sept 107.00-6.95, Nov 110.00 only. Sales: 17 lots of 100 tonnes.

Old crop markets improved on rumours of further good export figures with first day tenders around expected levels. Values failed to maintain highs after profit taking. New crops were slightly easier in quiet trading, reports Muirpace.

	WHEAT		BARLEY	
Mnth	Yesterd'ys close	+ or —	Yesterd'ys close	+ or —
May	127.95	+0.45	120.00	+0.15
July	129.85	+0.55	—	
Sept.	108.75	—0.15	106.90	—0.05
Nov	111.65	—0.15	109.90	—0.05
Jan	114.75	—0.15	112.85	—0.10
Mar	117.65	—0.15	115.50	—

HGCA — Locational ex-farm spot prices: Feed wheat: S East 128.30, W Mids 129.80. Feed barley: S East 121.70, S West 121.80, W Mids 120.00, N West 121.00. The UK monetary co-efficient for the week beginning Monday April 30 (based on HGCA calculations using three days' exchange rates) is expected to remain unchanged.

LONDON GRAINS—Wheat: U.S. Dark Northern Spring No 1 14 per cent June 140.75, July 138.75, Aug 136.75, sellers transhipment East Coast. English Feed fob May/June 128, sellers East Coast. Maize: U.S. No 3 Yellow/French April 147.50, first half May 148.25, sellers East Coast. Barley: English Feed fob May 125, seller East Coast. Rest unquoted.

PIGMEAT

Current hot weather, with more forecast, kept buyers reserved and this tendency is felt likely to continue in the short term, reports CCST commodities.

Month	Yesterdays close	Previous close	Business done
	p. per kilo (deadweight)		
June	117.4	118.0	118.1-117.4
Aug.	114.0	114.4	114.8
Oct	118.4	119.4	119.2-118.2
Nov.	118.9	120.0	118.5-118.3
Feb.	116.4	117.0	—
April	116.4	116.9	117.0

Sales: 81 (120) lots of 50 carcases 3,250 kilos.

POTATOES

May trading was erratic, initially higher but easing during the mid session, closing steady. New crops found strong support after fine weekend weather, with buyers chasing limited selling to establish gains of £6.50 to £9.50 by the close, reports Coley and Harper.

Month	Yesterd'ys close	Previous close	Business Done
	£ per tonne		
April	214.50	209.60	214.8-213.8
May	210.50	209.30	212.5-205.5
Nov	72.50	66.00	75.00-67.10
Feb	81.50	74.00	80.50-77.00
April	96.00	86.50	97.00-87.90

Sales: 755 (1,198) lots of 40 tonnes.

RUBBER

The London physical market opened about unchanged, attracted very little interest throughout the day and closed quiet and on an easier note, reports Lewis and Peat. The Kuala Lumpur May fob prices for RSS No 1 was 242.5 (246.5) cents a kg and for SMR 20 was 223.5 (225.0).

No. 1 R.S.S.	Yesterday's close	Previous close	Business Done
	£ per tonne		
May	730-776	740-776	—
June	735-776	747-780	—
Jly-Sept	768-771	778-779	—
Oct-Dec	802-804	809-810	803-800
JanMch	824-825	831-832	824-824
Apl-Jne	844-847	852-855	—
Jly-Sept	865-875	866-877	—
Oct-Dec	870-896	881-900	—

Sales: 11 (58) lots of 15 tonnes, 0 (0) lots of 5 tonnes.

Physical closing prices (buyers): Spot 74.50 (75.50p); June 79.50p (80.50p); July 79.75p (80.00p).

SOYABEAN MEAL

The market opened £1.50 up in thin *volume reports T. G. Roddick.* Good commission house buying pushed market up further still closing with gains of £3 on the day.

	Yestday's close	+ or —	Business Done
	£ per tonne		
June	155.20-59.00	+2.35	156.00-56.50
August	158.00-61.00	+2.90	161.40-59.00
October	162.70-62.40	+3.45	162.70-62.70
Dec	165.50-64.50	+1.90	164.80-64.50
Feb.	—	—	—
April	—	—	—
June	—	—	—

Sales: 60 (82) lots of 100 tonnes.

SUGAR

Tate and Lyle delivery price for granulated basis sugar was £214.50 (£219.75) a tonne for export.

No.4 Contract	Yestday's close	Previous close	Business done
	£ per tonne		
May	118.00	115.00-20.00	115.00-12.00

No. 6 Contract	$ per tonne		
May	161.80-62.00	163.40-63.80	162.60-60.80
Aug.	175.60-75.80	176.60-77.00	176.80-74.20
Oct	187.80-88.00	187.80-88.20	187.90-86.60
Dec.	194.20-94.80	194.20-94.80	194.20-92.40
Mar.	215.60-15.40	215.40-15.80	215.00-13.80
May	222.40-23.00	221.80-22.40	226.40
Aug.	231.40-32.00	231.60-32.00	231.40

Sales: No 4 40 (70); No 6 1,377 (3,465) lots of 50 tonnes.

International Sugar Agreement—(U.S. cents per pound fob and stowed Caribbean ports). Prices for April 19: *Daily price 5.80 (5.88); 15-day average* 6.10 (6.14).

LONDON DAILY PRICE — Raw sugar £111.50 (£113.00), down £1.50 a tonne fob April-May-June delivery. White sugar $170.50 ($173.00), down $2.50.

WOOL FUTURES

SYDNEY GREASY WOOL—Close: (in order: buyer, seller, business): Australian cents per kg. May 416, 425, 418; Aug 440, 442, untraded; Oct 442, 444, 444-442; Dec 463, 457, 452; Jan 453, 457, 453; March 463, 470, 464-463; May 474, 478, 473; Aug 485, 489, untraded; Oct 485, 489, untraded. Sales: 13.

COTTON

Spot and shipment sales in Liverpool amounted to 40 tonnes. Activity was on a restricted scale and operations were only tentative. A scrappy demand came forward in certain African styles and Middle Eastern styles were in modest request.

JUTE

JUTE—C+F Dundee April/May, BWC BTC $524, BWD BTD $514, C+F Antwerp BWC BTC $525, BWD BTD $515, C+F Dundee April ex-India 40 inch 10 oz £21.18. 40 inch 7.5 oz £17.03, *B Twills £58.04.*

INDICES

FINANCIAL TIMES

Apr. 19	Apr. 18	M'th ago	Year ago
309.35	309.12	304.88	269.55

(Base: July 1 1952=100)

REUTERS

Apr. 24	Apr. 19	M'th ago	Year ago
2011.5	2008.7	2003.7	1764.4

(Base: September 18 1931=100)

MOODY'S

Apr. 18	Apr. 17	M'th ago	Year ago
1074.8	1071.9	1075.0	1041.3

(Base: December 31 1931=100)

DOW JONES

Dow Jones	Apr. 18	Apr. 17	Month ago	Year ago
Spot	140.90	140.62	142.87	148.60
Fut's	144.16	143.16	144.93	147.06

(Base: December 31 1974=100)

American market prices were unavailable for this edition

MEAT/FISH

SMITHFIELD—Pence per pound. Beef—Scotch killed sides 78.0 to 85.0. Veal—Dutch hinds and ends 120.0 to 124.0. Lamb—English small 122.0 to 125.0, medium 118.0 to 124.0, heavy 118.0 to 121.5. Imported: New Zealand PL (new season) 66.5 to 67.5. Pork—English under 100 lb 51.0 to 60.0, 100-120 lb 56.5 to 58.5, 120-160 lb 50.0 to 58.0.

English produce: Apples—Per pound Cox's 0.18-0.31, Ida Red 0.10-0.15, Bramley 0.18-0.26, Laxton 0.14-0.17. Pears—Per pound Conference 0.11-0.22. Potatoes — Whites 5.80-6.40, Edwards 6.40-7.80, Bakers 7.50-9.00; New, Isle of Wight per pound 0.90. Mushrooms—Per pound open 0.50-0.80, closed 0.70-0.80. Lettuce—Per tray round 1.80-2.00, Cos dozen 3.00. Onions—Per 55 lb 7.80-9.00. Beetroots — 28 lb round 2.50-2.80, long 3.20-3.40. Swedes—28 lb 1.40-1.60. Carrots—28 lb 2.80-3.20. Greens—30 lb Kent 2.80-3.00. Leeks—Per pound 0.16-0.18. Tomatoes — Per pound 0.45-0.50. Cucumbers — Tray 3.00-3.60. Cauliflowers — Kent dozen 3.50-3.80, Lincoln 3.50. Spring onions—Bunch 0.16-0.18. Rhubarb—Outdoor per pound 0.18-0.18. Radishes — Bunched 0.14-0.15.

COVENT GARDEN—Imported produce: Tangors — Jaffa: 6.00-6.40. Topaz — Jaffa: 4.90-5.65. Karsa—Spania: 3.80-4.20. Oranges — Spania: 3.80-4.20; Moroccan: Maroc latas 3.80-5.00; Jaffa: Shamoutis 20 kg 75 5.40, 88 4.70, 105 4.20, 123 4.10, 144 4.40, 168 5.00. Hadar 60 3.90, 75 3.75. Valencia Lates 15 kg 56 4.25, 12 3.80, 88 3.60, 100 3.40, 113 3.50; Cyprus: Approx 15 kg Valencia Lates 3.60-4.20; Egyptian: Valencia Lates 2.50-2.80; Italian: Bloods 3.20-3.40. Lemons—Outspan: 5.60-6.00; Italian: Carton 4.00-4.50; Cyprus: 10 kg boxes 2.50-3.60; Spania: 5 kg 1.50-1.60; Jaffa: 15 kg 4.50-5.25, 6 kg 3.00-3.20. Grapefruit—Jaffa: 20 kg 36 5.90, 40 5.60, 48 5.60, 56 5.30, 64 4.90, 75 4.80; U.S.: Ruby 9.00-10.00; Cyprus: 32 3.80-4.00, 40 3.60-3.80, 48 3.50-3.60, 56 3.20-3.40, 64 3.40-3.50.

Seifin Ltd

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Dollar continues to improve

The dollar continued to improve in currency markets yesterday, underpinned by fears of higher U.S. interest rates. News of a 0.8 per cent rise in U.S. durable goods orders in March was down from a revised figure of 2.9 per cent in February but was above market expectations of a 0.1 per cent decline. U.S. consumer prices rose 0.2 per cent in March, much in line with market expectations. The dollar's improvement was mainly at the expense of the D-mark with fears of disruption caused by a metal workers' strike tending to undermine the German unit. The dollar rose to DM 2.6795 from DM 2.6570 last Thursday and was quoted at DM 2.6850 in early New York trading. Against the Swiss franc it improved to SwFr 2.2165 from SwFr 2.1950 and Y225.45 compared with Y224.75. It was also up against the French franc at FFr 8.2390 from FFr 8.1650. On Bank of England figures, the dollar's trade weighted index rose from 127.8 to 128.6.

STERLING — Trading range against the dollar in 1984 is 1.4940 to 1.3955. March average 1.4564. Trade weighted index 79.9 against 80.0 at noon and 79.9 in the morning and compared with 79.9 on Thursday and 83.6 six months ago.

Sterling was weaker against a strong dollar but improved against most European currencies. On balance it showed little overall change, with its index unchanged from Thursday. Against the dollar it closed at $1.4085-1.4095, a fall of 95 points from Thursday. It was firmer against the D-mark, however, at DM 3.7775 from DM 3.7700 and SwFr 3.1250 compared with SwFr 3.1150. It rose to FFr 11.6075 from FFr 11.58 against the French franc but eased in terms of the Japanese yen to Y318 from Y319.

D-MARK — Trading range against the dollar in 1984 is 2.8425 to 2.5535. March average 2.5867. Trade weighted index 125.9 against 127.1 six months ago.

The dollar was fixed at DM 2.6765 against the D-mark at yesterday's fixing in Frankfurt and there was no intervention by the Bundesbank. The rate was up sharply from last Thursday's figure of DM 2.6491 and was partly a reflection of market fears over the implications of an impending strike in German metal working and printing industries. The dollar's fixing was its highest for just over a month.

The U.S. unit was also underpinned by growing evidence of a possible increase in U.S. interest rates in order to contain the economic growth rate in the U.S. Trading volume was on the low side however, on the first day after a four-day Easter break. Further U.S. economic statistics were due for release later in the day, also inhibiting trading. Sterling was fixed at DM 3.7860 and the French franc at DM 32.5150.

ITALIAN LIRE—Trading range against the dollar in 1984 is 1,720.75 to 1,591.0. March average 1,613.68. Trade-weighted index 48.8 against 49.8 six months ago.

The Italian lire lost ground yesterday against the dollar and its EMS partners. News of a sharp rise in Italian money supply figures appeared to have little effect on the market. The dollar rose to L1,654.75 from L1,646.50 on interest rate fears while sterling improved to L2,345.7 from L2,331.00. Within the EMS the D-mark was higher at L618.27 from L618.00 and the Belgian franc at L30.311 from L30.276. The French franc was slightly weaker, however, at L201.42 compared with L201.75.

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU April 24	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	44.9008	45.6143	+1.59	+1.58	±1.5447
Danish Krone	8.14104	8.21672	+0.92	+0.85	±1.6425
German D-Mark	2.24184	2.23535	−0.29	−0.36	±1.0642
French Franc	6.87456	6.87177	−0.04	−0.11	±1.4052
Dutch Guilder	2.52595	2.52085	−0.20	−0.27	±1.4964
Irish Punt	0.72569	0.729175	+0.48	+0.41	±1.6699
Italian Lira	1403.49	1383.63	−1.42	−1.42	±4.1505

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

£ IN NEW YORK

	April 24	Prev. close
Spot	$1.4070-4080	$1.4150-4160
1 month	0.27-0.29 dis	0.25-0.27 dis
3 months	0.78-0.80 dis	0.77-0.79 dis
12 months	3.28-3.37 dis	3.25-3.30 dis

£ forward rates are quoted in U.S. cents discount.

THE POUND SPOT AND FORWARD

April 24	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.4060-1.4175	1.4085-1.4095	0.25-0.30c dis	−2.34	0.77-0.82dis	−2.25
Canada	1.8090-1.8160	1.8040-1.8050	0.30-0.40c dis	−2.33	0.88-0.98dis	−2.05
Nethlnd.	4.25¾-4.28¼	4.25¼-4.26¼	1¼-¼c pm	2.81	3¼-2¾pm	2.70
Belgium	77.77-77.77	77.10-77.20	12-20c dis	−2.80	42-52dis	−2.44
Denmark	13.85-13.93	13.86-13.87	2¾-3¾ore dis	−2.38	5¼-6¼dis	−1.73
Ireland	1.2260-1.2370	1.2312-1.2322	0.34-0.41p dis	−3.65	1.07-1.20dis	−3.69
W. Ger.	3.76½-3.79½	3.77½-3.78½	1⅛-⅞pf pm	3.18	3¼-2⅞pm	3.06
Portugal	190½-192¼	191¼-191¾	120-325c dis	−13.94	410-960dis	−14.31
Spain	212.50-214.00	212.70-212.90	125-145c dis	−7.81	410-435dis	−7.94
Italy	2331-2344	2335-2337	12¾-14¾lire dis	−7.06	40-42dis	−7.02
Norway	10.77-10.84	10.78-10.79	4-4⅞ore dis	−4.94	11½-12½dis	−4.45
France	11.60-11.65½	11.60¾-11.61¾	3⅞-4⅞c dis	−4.13	12-14dis	−4.48
Sweden	11.13-11.19	11.13½-11.14½	1⅞-2⅞ore dis	−2.38	5⅞-6¼dis	−2.14
Japan	317-319½	317½-318½	⅞-⅝y pm	2.83	2⅜-1⅞pm	2.52
Austria	26.50-26.70	26.53-26.58	6¼-4⅞gro pm	2.46	16¼-12¼pm	2.16
Switz.	3.11½-3.14½	3.12-3.13	1½-1¼c pm	5.28	4-3½pm	4.90

Belgian rate is for convertible francs. Financial franc 78.10-78.20. Six-month forward dollar 1.57-1.62c dis. 12-month 3.25-3.35.

THE DOLLAR SPOT AND FORWARD

April 24	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.4060-1.4175	1.4085-1.4095	0.25-0.30c dis	−2.34	0.77-0.82dis	−2.25
Ireland†	1.1420-1.1470	1.1430-1.1450	0.15-0.11c pm	1.36	0.45-0.37pm	1.43
Canada	1.2808-1.2815	1.2808-1.2813	0.08-0.01c pm	0.33	0.16-0.05pm	0.23
Nethlnd	3.0180-3.0245	3.0235-3.0245	1.34-1.29c pm	5.23	3.65-3.63pm	4.84
Belgium	54.64-54.75	54.73-54.75	1-3c dis	−0.44	1-4dis	−0.18
Denmark	9.8340-9.8500	9.8420-9.8450	.35-.15ore pm	0.30	2.50-2.00pm	0.91
W. Ger	2.6635-2.6825	2.6780-2.6800	1.29-1.24pf pm	5.67	3.58-3.51pm	5.23
Portugal	135.40-136.30	135.80-136.30	80-200c dis	−11.59	220-600dis	−12.18
Spain	151.00-151.08	151.03-151.08	65-75c dis	−5.62	225-255dis	−6.43
Italy	1653.5-1659	1658-1659	6.3-6.8lire dis	−4.74	19-20dis	−4.71
Norway	7.6450-7.6575	7.6525-7.6575	1.30-1.80ore dis	−2.43	4.00-4.50dis	−2.22
France	8.2000-8.2450	8.2365-8.2415	1.00-1.20c dis	−1.60	4.00-4.50dis	−2.06
Sweden	7.9000-7.9100	7.9050-7.9100	.10orepm-.40dis	−0.23	.20pm-.30dis	−0.03
Japan	224.70-225.60	225.40-225.50	1.00-0.90y pm	5.06	2.66-2.58pm	4.63
Austria	18.83½-18.84½	18.83½-18.84¼	7.75-7.25gro pm	4.78	2.50.19.50pf	4.35
Switz	2.2010-2.2190	2.2160-2.2170	1.47-1.43c pm	7.86	3.93-3.89pm	7.06

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency. Belgian rate is for convertible francs. Financial franc 55.45-55.50.

OTHER CURRENCIES

Apr. 24	£	$		£ Note Rates
Argentina Peso	51.27-51.35	36.27-36.29	Austria	26.50-26.80
Australia Dollar	1.5360-1.5380	1.0885-1.0890	Belgium	78.40-79.20
Brazil Cruzeiro	1,980.63-2,001.65	1,408-1,415	Denmark	13.83-13.97
Finland Marka	8.0286-8.0484	5.6825-5.6875	France	11.58-11.69
Greek Drachma	148.867-148.478	105.50-105.75	Germany	3.76½-3.80½
Hong Kong Dollar	11.0498-11.0558	7.8115-7.81135	Italy	2310-2340
Iran Rial	123.80*	87.10*	Japan	316-321
KuwaitDinar(KD)	0.41558-0.41608	0.2946-0.2946	Netherlands	4.25-4.29
Luxembourg Fr.	77.10-77.20	54.73-54.75	Norway	10.77-10.88
Malaysia Dollar	3.2345-3.2405	2.2870-2.2885	Portugal	189-197
New ZealandDlr.	2.1456-2.1505	1.5205-1.5225	Spain	207-217
Saudi Arab. Riyal	4.9665-4.9720	3.5200-3.5210	Sweden	11.11-11.22
Singapore Dollar	2.9470-2.9530	2.0840-2.0855	Switzerland	3.11-3.14
Sth African Rand	1.7637-1.7672	1.2515-1.2530	United States	1.40½-1.42½
U.A.E. Dirham	5.1810-5.1886	3.6720-3.6730	Yugoslavia	178-198

* Selling rates.

CURRENCY MOVEMENTS

Apr. 19	Bank of England Index	Morgan Guaranty Changes%
Sterling	79.9	−11.0
U.S. dollar	128.6	+15.9
Canadian dollar	89.0	−2.6
Austrian schilling	116.1	+3.8
Belgian franc	90.1	−12.8
Danish kroner	78.4	−6.1
Deutsche mark	125.9	+8.7
Swiss franc	147.1	+11.8
Guilder	115.1	+4.9
French franc	66.4	−14.7
Lira	48.8	−18.7
Yen	160.8	+16.3

Morgan Guaranty changes: average 1980-1982=100. Bank of England Index (base average 1975=100).

CURRENCY RATES

April 24	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	—	0.744498	0.590297
U.S. $	9	1.05316	0.835270
Canadian$	10.78	*	1.07023
Austria Sch.	4½	19.8563	15.7365
Belgian Fr	11	57.5447	45.6413
Danish Kr	7	10.3651	8.21672
D'mark	4	2.81878	2.23535
Guilder	5	3.17580	2.52085
French Fr.	9½	8.65487	6.87177
Lira	16	—	1383.63
Yen	5	236.698	188.145
Norwgn Kr.	8	8.05351	6.39358
Spanish Pta.	—	159.107	126.164
Swedish Kr.	8½	8.31580	6.60196
Swiss Fr	4	2.33296	1.85029
Greek Dr'ch	20½	111.472	88.37126

*C$/SDR rate for April 23: 1.35158.

EXCHANGE CROSS RATES

Apr. 24	Pound St'rling	U.S. Dollar	Deutsche m'k	Japanese Yen	French Franc	Swiss Franc	Dutch Guild	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	1.409	3.778	318.0	11.61	3.125	4.263	2335.	1.805	77.15
U.S. Dollar	0.710	1.	2.681	225.7	8.238	2.218	3.025	1658.	1.281	54.76
Deutschemark	0.265	0.373	1.	84.18	3.073	0.827	1.128	618.4	0.478	20.42
Japanese Yen 1,000	3.145	4.431	11.88	1000.	36.50	9.827	13.40	7346.	5.657	242.6
French Franc 10	0.862	1.214	3.254	274.0	10.	2.692	3.673	2012.	1.555	66.47
Swiss Franc	0.320	0.451	1.209	101.8	3.714	1.	1.364	747.5	0.577	24.69
Dutch Guilder	0.235	0.331	0.886	74.60	2.723	0.733	1.	548.0	0.423	18.10
Italian Lira 1,000	0.428	0.603	1.617	136.1	4.969	1.338	1.825	1000	0.772	33.03
Canadian Dollar	0.554	0.781	2.093	176.2	6.433	1.732	2.362	1295.	1.	42.75
Belgian Franc 100	1.296	1.826	4.896	412.2	15.05	4.051	5.525	3028.	2.339	100.

EURO-CURRENCY INTEREST RATES (Market closing rates)

Apr. 24	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	D-mark	French Franc	Italian Lira	Belgian Franc Conv.	Belgian Franc Fin.	Yen	Danish Kroner
Short term	8⅞-8⅝	10-10¼	10-10⅜	5 11/16-5 13/16	1-1¼	5⅜-5⅞	11¾-12	14¾-15¾	11⅞-12	11⅞-12	5 11/16-5 13/16	13-13½
7 days' notice	8 7/16-8⅝	10⅛-10⅜	10-10⅜	5¼-5⅞	6⅛-6⅜	5 7/16-5 9/16	11⅞-12⅛	13¾-15¼	11⅞-12	11¼-11½	5 11/16-5 13/16	11¼-11¾
Month	8⅜-8 9/16	10⅛-10¼	10 3/16-10⅜	5 9/16-5 11/16	3⅜-3½	5⅜ 5½	12⅛-12⅜	14⅞-15⅜	11¼-11⅝	11¼-11½	5 11/16-6 1/16	10¾-11¼
Three months	8 11/16-8⅞	10⅞-11⅛	10 9/16-10¾	6 1/16-6 3/16	3⅝-3¾	5 9/16-5 11/16	12⅞-13⅛	15⅝-16⅞	11¼-11¾	11¼-11½	6 1/16-6 3/16	10⅝-11⅛
Six months	9 1/16-9⅛	11 3/16-11 5/16	11-11 3/16	6⅛-6¼	3⅞-4	5¾-5⅞	14⅛-14⅜	16¼-16⅝	11¼-11⅝	11¼-11½	6¼-6⅜	10¾-11¼
One year	9⅜-9½	11 11/16-11 13/16	11 9/16-11¾	6⅛-6⅝	4 3/16-4 5/16	6⅛-6¼	14⅝-15	17-17½	11¾-12¼	11⅜-11⅝	6 5/16-6 7/16	11⅝-11⅞

Asian $ (closing rates in Singapore): Short-term 10 5/16-10 7/16 per cent; seven days 10 9/16-10 11/16 per cent; one month 10 11/16-10 13/16 per cent; three months 10 15/16-11 1/16 per cent; six-months 11¼-11⅜ per cent; one year 11¾-11⅞ per cent. Long-term Eurodollars two years 12½-12⅝ per cent; three years 12¾-13 per cent; four years 12⅞-13⅛ per cent; five years 13-13⅜ per cent nominal closing rates. Short-term rates are call for U.S. banks and Japanese yen; two days' notice.

MONEY MARKETS

UK rates little changed

Trading was rather subdued in the London money market yesterday. Short-term funds were in adequate supply on the first day after the long Easter break. Overnight interbank money opened at 8¼-8⅜ per cent and failed to move above this level. Later in the day balances were taken down to 7 per cent. Three-month interbank money was quoted at 8 11/16-8 13/16 per cent the same as on Thursday while three-month eligible bank bills were bid at 8 13/32 per cent, also unchanged from Thursday. There appeared to be little reaction to the possibility of higher U.S. interest rates or the prospect of a lengthy miners' dispute.

The Bank of England forecast a flat position in the money market. Factors affecting the market included maturing assistance and a take up of Treasury bills together draining £462m and the unwinding of previous sale and repurchase agreements a further £141m. On the other hand Exchequer transactions added £355m and there was a fall in the note circulation of £210m. In addition banks brought forward balances £40m above target.

The Bank did not intervene in the morning or in the afternoon but provided late assistance of around £50m.

In Brussels money market interest rates were little changed. The four-month bond fund rate was also static after yesterday's auction at 11.90 per cent. The stability of short term rates at the moment is a reflection of the Belgian franc's stability and the Government's determination to push through its austerity programme. This includes a plan to reduce public spending in order to tackle Belgium's large budget deficit.

Sight deposits of Swiss commercial banks with the Swiss National Bank, a measure of money market liquidity, rose by SwFr 1.25bn to SwFr 8.16bn in the 10 days to April 19. Foreign exchange reserves increased by SwFr 884.7m to SwFr 29.91bn during the same period.

UK clearing banks' base lending rate 8½-8¾ per cent (since March 15 and 16)

MONEY RATES

Apr. 24	Frankfurt	Paris	Zurich	Amst'dam	Tokyo	Milan	Brussels	Dublin
Overnight	5.5	11¼	1-2	5¼-5½		16½-17¼	12.10	11½-12¼
One month	5.5-5.7	12⅛-12¼	3⅝-3¾	5¼-5½		16½-17¼	11¼-11⅜	12⅛-12½
Two months	5.55-5.80	12¼-12⅜	—	—		—	—	12⅛-12½
Three months	5.70-5.85	12⅛-12¼	3¾-3⅞	5⅜-5⅝	6.21875	17¼-17½	11¼-11⅜	12⅛-12½
Six months	5.80-5.95	12⅛-12¼	—	5⅝-6	—	—	11½-11⅝	12⅛-12½
Lombard	6.5	—	—	6	—	—	—	—
Intervention	—	12	—	5⅞	—	—	—	—

LONDON MONEY RATES — Discount Houses Deposit and Bill Rates

Apr. 24 1984	Sterling Certificate of deposit	Interbank	Local Authority deposits	Company Deposits	Market Deposits	Treasury (Buy)	Treasury (Sell)	Eligible Bank (Buy)	Eligible Bank (Sell)	Fine Trade (Buy)
Overnight	—	7-8⅝	8¼-8⅜	8½	6-8½	—	—	—	—	—
2 days notice	—	—	8½-8⅝	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 day notice	—	8 7/16-8⅝	8½	8⅝-8¾	8⅜-8½	—	—	—	—	—
One month	8⅝-8½	8 7/16-8 9/16	8 9/16	8¾	8½	8½	8 13/32	8½	8 13/32	9⅛
Two months	8¾-8 11/16	8 11/16-8 13/16	8⅝	8⅞	8½-8 9/16	8 13/32	8 7/16	8 13/32	8 7/16	9 1/16
Three months	8 13/16-8 11/16	8 11/16-8 13/16	8¾	9 1/16	8½-8⅝	8 13/32	8⅝	8 13/32	8⅝	9 5/16
Six months	9 1/16-9 1/16	9 1/16-9 3/16	9	—	—	—	—	8¾	8⅝-8 21/32	9⅜
Nine months	9⅜-9 5/16	9¼-9⅜	9 5/16	—	—	—	—	—	—	—
One year	9 7/16-9¼	9⅝-9½	9¾	—	—	—	—	—	—	—

	Local Auth. negotiable bonds	Local Authority Deposits	Finance House Deposits	$ Cert of Deposits	SDR Linked Deposits	ECU Linked Deposits
One month	9⅛-8⅞	—	8½	10.5-10.8	9 9¼	8 13/16-9⅛
Two months	9¼-9	—	8⅝	10.55-10.75	9⅛-9⅜	9 1/16-9¼
Three months	9¼-9	—	8⅞	10.75-10.85	9¼-9½	9 3/16-9⅜
Six months	9¼-9	—	9¼	11.0-11.1	9 9/16-9 11/16	9⅝-9 13/16
Nine months	9⅝-9⅜	—	9⅜	11.15-11.35	—	—
One year	9⅝-9⅜	—	9½	11.55-11.75	10-10¼	10-10 3/16
Two years	—	10	—	—	—	—
Three years	—	10¼	—	—	—	—
Four years	—	10⅜	—	—	—	—
Five years	—	10½	—	—	—	—

ECGD Fixed Rate Export Finance Scheme IV. Average Rate of Interest period March 7 to April 3 1984 (inclusive): 8.976 per cent. Local authorities and finance houses seven days' notice, others seven days' fixed. Finance Houses Base Rate (published by the Finance Houses Association): 9½ per cent from April 1, 1984. London and Scottish Clearing Bank Rates for lending 8½-8¾ per cent. London Deposit Rate for sums at seven days' notice 5¼-5½ per cent. Treasury Bills: Average tender rates of discount 8.3800 per cent. Certificates of Tax Deposit (Series 6). Deposit of £100,000 and over held under one month 8¾ per cent; one-three months 8¾ per cent; three-six months 9 per cent; six-nine months 9⅛ per cent; nine-12 months 9½ per cent. Under £100,000 8½ per cent from April 11. Deposits held under Series 4-5 9½ per cent. The rate for all deposits withdrawn for cash 7 per cent.

FT LONDON INTERBANK FIXING

LONDON INTERBANK FIXING (11.00 a.m. April 24)

3 months U.S. dollars	
bid 10 15/16	offer 11 1/16
6 months U.S. dollars	
bid 11 5/16	offer 11 5/16

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11 a.m. each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

MONEY RATES

NEW YORK (Lunchtime)

Prime rate	12
Broker loan rate	11-11½
Fed funds	9⅝
Fed funds at intervention	—

Treasury Bills

One month	9.15
Two month	9.30
Three month	9.65
Six month	9.76
One year	9.98

Treasury Bonds

Two year	99⅝
Three year	97⅞
Four year	99 1/32
Five year	97 1/32
Seven year	98 5/32
10 year	94 11/32
30 year	93 21/32

FINANCIAL FUTURES

Quiet trading

Prices of contracts on the London International Financial Futures Exchange attempted a rally on the news around lunchtime that U.S. consumer prices had increased by only 0.2 per cent in March, compared with 0.4 per cent the previous month. But the market lacked the conviction to follow through, and prices retreated as the Chicago futures markets traded sluggishly.

Trading in London was very quiet following the long Easter holiday, with the long term gilt contract only moving through the 1,000 lot level in the afternoon. Gilt futures for June delivery opened nervously, following the weak tone to the U.S. bond market on Monday, but then met some buying interest before profit taking wiped out part of the early gains. After starting at the day's low of 106-14 June gilts touched a peak of 107-00, and closed at 106-25, compared with 106-17 at Thursday's close.

Three-month sterling deposits also traded very quietly, again opening at the day's low of 90.95 for June delivery. There was little incentive in the market, with cash rates steady on the money market after a day of ample liquidity, while sterling eased against the strong dollar, but improved in terms of Continental currencies on the foreign exchanges. June sterling deposits touched a peak of 90.98, and closed at 90.97, compared with the previous settlement of 90.96.

Three-month Eurodollars also traded narrowly, although the market was rather more active than sterling denominated contracts. June delivery opened at the day's low of 88.84, and touched a high point of 88.90.

June Eurodollars finished unchanged at 88.85.

LONDON

THREE-MONTH EURODOLLAR $1m points of 100%

	Close	High	Low	Prev
June	88.85	88.90	88.84	88.85
Sept	88.33	88.39	88.33	88.37
Dec	87.90	87.97	87.90	87.95
March	87.56	87.62	87.57	87.60
June	—	—	—	87.31

Volume 3,133 (4,003)
Previous day's open int 14,773 (14,475)

THREE-MONTH STERLING DEPOSIT £250,000 points of 100%

	Close	High	Low	Prev
June	90.97	90.98	90.95	90.96
Sept	90.64	90.65	90.63	90.61
Dec	90.33	90.34	90.31	90.32
March*	90.06	90.08	90.05	90.10
June*	—	—	—	89.95

Volume 454 (925)
Previous day's open int 8,582 (8,449)
*£500,000 points of 100%

20-YEAR 12% NOTIONAL GILTS £50,000 32nds of 100%

	Close	High	Low	Prev
June	106-25	107-00	106-14	106-17
Sept	106-05	—	—	105-29
Dec	105-17	—	—	105-09
March	104-29	—	—	104-21
June	104-09	—	—	104-01

Volume 1,339 (2,803)
Previous day's open int 2,789 (5,257)
Basis quote (clean cash price of 13¾% Treasury 2003 less equivalent price of near futures contract) 22 to 34 (32nds)

STERLING £25,000 $ per £

	Close	High	Low	Prev
June	1.4140	1.4190	1.4145	1.4242
Sept	1.4205	1.4270	1.4270	1.4230
Dec	1.4285	1.4353	1.4353	1.4415

Volume 338 (43)
Previous day's open int 2,314 (2,343)

DEUTSCHE MARKS DM 125,000 $ per DM

	Close	High	Low	Prev
June	0.3763	0.3772	0.3752	0.3796
Sept	—	—	—	0.3844

Volume 98 (127)
Previous day's open int 524 (503)

SWISS FRANCS SwFr 125,000 $ per SwFr

	Close	High	Low	Prev
June	0.4550	0.4569	0.4560	0.4599
Sept	—	—	—	0.4679

Volume 5 (7)
Previous day's open int 214 (214)

JAPANESE YEN Y12.5m $ per Y100

	Close	High	Low	Prev
June	0.4462	0.4469	0.4465	0.4479
Sept	—	—	—	0.4529

Volume 12 (9)
Previous day's open int 477 (479)

CHICAGO

U.S. TREASURY BONDS (CBT) 8% $100,000 32nds of 100%

	Latest	High	Low	Prev
June	64-26	65-01	64-21	64-29
Sept	64-06	64-14	64-03	64-11
Dec	63-27	64-00	63-22	63-29
March	63-14	63-21	63-11	63-18
June	63-04	63-11	63-01	63-08
Sept	62-27	62-28	62-24	62-31
Dec	62-19	62-19	62-17	62-23
Mar	—	—	—	62-17

U.S. TREASURY BILLS (IMM) $1m points of 100%

	Latest	High	Low	Prev
June	90.06	90.11	90.06	90.06
Sept	89.54	89.60	89.51	89.55
Dec	—	89.20	89.13	89.16
March	88.83	88.90	88.82	88.86
June	—	88.61	88.65	88.59
Sept	88.31	88.37	88.30	88.36
Dec	—	88.10	88.10	88.15
March	—	87.95	87.90	87.96

CERT. DEPOSIT (IMM) $1m points of 100%

	Latest	High	Low	Prev
June	88.97	89.02	88.97	88.97
Sept	88.38	88.44	88.36	88.41
Dec	—	87.98	87.92	87.95
March	87.55	87.60	87.56	87.59

THREE-MONTH EURODOLLAR (IMM)

	Latest	High	Low	Prev
June	88.55	88.60	88.53	88.53
Sept	87.96	88.02	87.95	87.98
Dec	87.51	87.59	87.51	87.53
March	—	87.20	87.12	87.17
June	86.78	87.78	86.77	86.22

STERLING (IMM) $s per £

	Latest	High	Low	Prev
June	1.4310	1.4205	1.4115	1.4205
Sept	1.4205	1.4270	1.4205	1.4280
Dec	1.4285	1.4340	1.4270	1.4360
March	1.4360	1.4415	1.4350	1.4440

GNMA (CBT) 8% $100,000 32nds of 100%

	Latest	High	Low	Prev
June	67-00	67-05	66-30	67-02
Sept	66-06	66-10	66-04	66-07
Dec	65-12	65-16	65-10	65-14
March	64-22	64-22	64-22	64-25
June	—	—	—	64-08
Sept	63-24	63-29	63-24	63-25
Dec	—	—	—	63-13

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. The following are closing prices for April 24.

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Alaska Housing 11¾ 94	100	94⅛	94⅝	−0⅛	−0⅝	12.77
American Savings 12 89	125	99⅛	99⅝	−0⅛	−0⅝	12.13
Australia Comm 11⅛ 90	100	97⅛	97⅝	−0⅛	−0⅝	11.78
Australia Comm 11½ 95	300	91⅝	92⅛	−0⅛	−0⅛	12.86
Australia Comm 11⅝ 98	100	91½	92	−0⅛	−0⅛	12.88
Australian Ind Dev 11 89	75	94¾	95¼	+0⅛	+0⅛	12.42
Bank Of Tokyo 11⅞ 90	100	94¾	95¼	0	−0⅛	13.01
Beneficial O/S Fin 12 91	100	93½	94	0	−0⅛	13.43
Brazil Fin 11⅞ 90	125	94⅜	94⅞	−0⅛	−0⅜	13.11
Canada 10⅝ 88	500	96½	97	−0⅛	−0⅛	11.80
C.C.C.E. 12⅝ 95	75	95	95½	−0⅜	−0⅝	13.43
D.N.C. 11¾ 91 WW	50	93⅞	94⅜	−0⅜	−0⅛	13.11
D.N.C. 11¾ 91 XW	50	92⅞	93⅜	−0⅛	−0⅛	13.32
[illegible]						

World Bank 11½ 89	200	95⅛	95⅝	0	−0⅛	12.69
World Bank 12 93	200	95⅛	95⅝	−0⅛	−0⅛	12.78
Yasuda Tst&Fin 12⅝ 89	100	96½	97	0	−0⅛	13.38

Average price change On day −0⅛ on week −0⅛

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Allied Chemical 7½ 94	125	99⅝	100⅛	0	−0⅛	7.51
Amca Int'l 8¼ 91	100	100⅛	100⅝	−0⅛	−0⅛	8.17
A.M.A.S. 8½ 91	150	100⅝	101	0	0	8.33
Austria Republic 7⅝ 94	200	98⅝	98⅞	+0⅛	−0⅛	7.83
Barclays O/S 8⅛ 98	250	100⅝	101⅛	−0⅛	−0⅛	8.00
Baxter Travenol 7¼ 94	200	97⅞	98⅜	0	−0⅛	7.56
Credit National 8⅛ 94	200	99⅝	100⅛	0	−0⅛	8.14
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CAPITAL MARKETS

Financial Times Wednesday April 25 1984

Prices drift forces cancellation of Indonesian issue

BY MARY ANN SIEGHART IN LONDON

EUROBOND prices drifted downwards yesterday and market conditions in the D-Mark sector were bad enough to force the cancellation of a scheduled DM 150m issue from Indonesia.

Only one new dollar deal was launched, a $50m, five-year floating rate note for Premier Group Holdings, the South African industrial conglomerate. It pays ⅛ per cent over the six-month London Interbank Offered Rate at par and the coupon is reset quarterly, giving investors a play on the yield curve. Led by Citicorp, it has total fees of 1.4 per cent.

The dollar secondary market was very quiet yesterday, with trading confined to professionals. Prices fell by about ¼ point.

Luxembourg is borrowing abroad for the first time through an Ecu 60m bond, the proceeds of which will be used to help restructure its ailing steel industry. The borrower is Société Nationale de Crédit et d'Investissement, but the 10-year bond is guaranteed by the Grand Duchy.

It has a 10⅛ per cent coupon with a price to be fixed on May 3. Lead managers are Banque Generale du Luxembourg, Banque Internationale à Luxembourg and Caisse d'Epargne de l'Etat. Despite the oversupply in the Ecu bond market, the issue traded reasonably well at a 1⅝ per cent discount.

The Asian Development Bank is raising Fl 200m through a 10-year public issue led by ABN Bank and Amro Bank. It has an 8¾ per cent coupon at par.

BHF Bank bond average		
April 24		Previous
99.583		99.722
High	1984	Low
100.009		98.056

Indian groups seek to raise $278m

BOMBAY – More than 20 Indian companies plan debenture issues in the next three months to raise 3bn rupees ($278m) in the domestic capital market, according to merchant bankers.

Several issues have been announced while others are being finalised as companies prepare to expand, modernise and diversify. Stockbrokers said most companies preferred to issue non-convertible debentures which have received an excellent response from investors.

Investors find non-convertible debentures attractive because they carry interest of 15 per cent as opposed to 13.5 per cent on convertibles and 10 per cent offered by banks on deposits.

The companies include Tata Iron and Steel, which is issuing non-convertible debentures for R500m and Reliance Textile Industries, which is proposing to raise R800m through convertible and non-convertible debentures. Bankers believe both issues will be oversubscribed and may together account for nearly R2bn.

Merchant bankers and stockbrokers hope that nearly R10bn will be raised through debentures, equity and fixed deposits in the fiscal year ending March 1985, against an estimated R8.5bn in 1983-84.

Bankers said more private sector companies were turning to the capital market for funds because of a high interest rate of 19.5 per cent charged by commercial banks.

"Companies are also wary of going to state-owned financial institutions despite their lower interest rate of 14.5 per cent because of red tape and the strings attached," one merchant banker said.

Last year, Tata Engineering and Locomotive raised a record R850m through a non-convertible debenture issue. Reuter

Gaz de France loan doubled

BY MARGARET HUGHES IN LONDON

LEAD MANAGERS Chase Manhattan and Société Générale yesterday confirmed that the Euroloan for Gaz de France has been doubled to $200m.

The loan, which went into syndication some 10 days ago, was heavily oversubscribed despite its long maturity and relatively generous terms for the borrower. By the end of last week commitments had reached $230m. As a result participants are reducing their original commitments by 35 per cent to provide the $200m now required by the borrower.

This means that the two lead managers will each be providing $12.75m, with another 25 banks putting up $6.5m each and another four each contributing $3m.

The loan, which is a revolving standby credit over 12 years with a five years grace period, carries a margin of ⅜ per cent over Eurodollar rates for the first 10 years, rising to ½ per cent over the final two years.

OVER-THE-COUNTER

Continued from Page 32

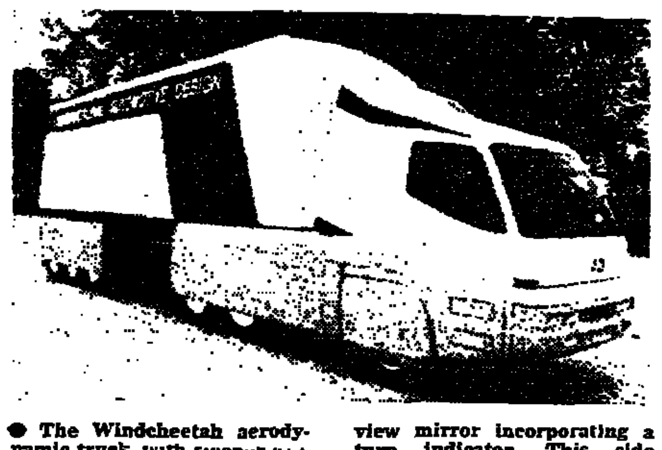
Stock	Sales (Hnds)	High	Low	Last	Chng
[illegible]					

SECTION IV

FINANCIAL TIMES SURVEY

Vehicle Design

A race is on throughout the motor industry worldwide to gain the most benefits from new technology. These innovations will, demand daunting levels of capital investment from most manufacturers, but the rewards for success will be high.



● The Windcheetah aerodynamic truck, with sleeper cab, by International Automotive Design of Worthing, Sussex. The model demonstrates two of the many style options possible. For this reason the right hand side (viewed from the front of cab) illustrates the most conventional solution, with open wheel arch and an aerodynamic rear view mirror incorporating a turn indicator. This side also has a "stable door" entrance. The other side presents a more radical solution — the front wheel is covered by a wind deflector which moves with this wheel. Rear vision is through a TV camera set in the black triangle above the cab separation line.

ON OTHER PAGES

Burden of design grows heavier

"MY BEST advice, as we face our technological future through to the year 2000, is to fasten our seatbelts and prepare for the ride of our lives."

This view was offered by Mr Roger Smith, chairman of the world's largest vehicle producer, General Motors, at the International Association for Vehicle Design's "Towards 2000" technology conference in London last month.

By JOHN GRIFFITHS

"Businessmen and engineers alike must never forget we are in a worldwide technology race today," he warned — and one which some companies would not survive through paying insufficient regard to innovation.

Nowhere is that race more intensive than in the motor industry, where it is also allied to dauntingly high levels of capital investment both in the product and the means to produce it. In Europe alone, according to Prof. Krish Bhaskar, author of a recent 700-page study of the industry, manufacturers need to invest $70bn between now and 1989 if they are to stay competitive with Japanese makers.

Mr Smith made two other highly pertinent points: that 90 per cent of the world's storehouse of knowledge has been generated in the past 30 years, and that it will double before the year 2000.

There is a two-fold effect as technology, and the knowledge storehouse increases:

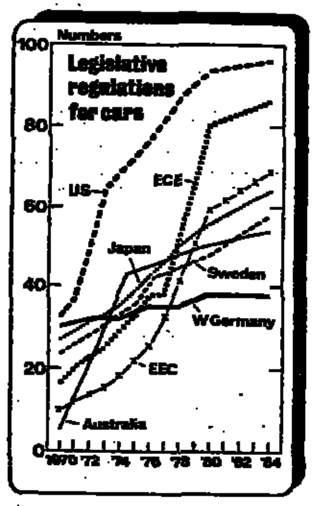
The options available, in motor industry terms, for the design, performance characteristics and all other aspects of the vehicle itself proliferate enormously—as do the options on how to produce it;

And consumers, the target of ever-intensifying competition, become ever more selective and demanding . . .

The increasing burden that this throws on the design function, and designers, should hardly need stating. Design, and the efficient production of a design — itself a design function — represents the fountainhead to which, in the end, consumer acceptance, and hence sales and profits, can all be traced back.

As Mr Merrick Taylor, managing director of the internationally successful UK truck cab concern Motor Panels, points out: "To talk about specific parts of an operation being cost-effective is all right, up to a point. But if you've got a bad product, *no one* is going to be cost-effective."

As past performances of some manufacturers have shown—BL in the UK, Fiat in Italy and American Motors Corporation in the U.S., among others—this supposedly self-evident truth has sometimes been lost sight of. All concede that the lack of investment in well designed, innovative models in the 1970s lay at the root of the experience of each in dwindling sales and the onset of the vicious circle of decreased revenue and the inability to invest.



As Mr Paul Tippett, AMC's chairman, concedes: our plunge into trouble was due to erratic performance. There would be an inconsistent stream of new models, then the company would lapse back into the old swamp."

Equally, the revival of all three has been product led: BL with its Metro, Maestro and now Montego; Fiat with the Uno which has transformed its performance in Italy and AMC through new model collaboration with Renault of France.

Success

General Motors itself, which has already once led European car sales this year, readily attributes its new success to the design packages presented by its new models, spearheaded by the Cavalier. Equally, while Ford's Sierra is selling well on the Continent, the continuing debate over its styling in the UK, and its less-than-hoped-for sales figures, has further focused the design debate.

The demands made of designers are now such that there is virtually no scope for weak points in any aspect of vehicle design, whether in styling, accommodation, ride and road holding or drive trains: "fuel efficiency and aerodynamics alone will not sell a vehicle," pointed out Mr Smith—"but a car or truck which has both; which looks good and performs well is still eminently saleable."

The introduction of computer technology, however, has broadened the responsibility of the original design function well beyond the vehicle itself, reaching further and further into the production process.

Increasingly, the product database initially created by the vehicle designer is being used to create the tooling for production, with a consequent sharp rise in the risks and costs of a design-stage error. Component suppliers, too, are being drawn into the process. GKN, for example is preparing a computer link with a North American tractor maker so that cab designs can be displayed simultaneously on screens within the two companies and their evolvement discussed.

Not only is the required sophistication of design increasing, so is the rate at which the function is required to be performed, under the pressure of, notably, competition from Japan.

The pressures stem, too, from flexible manufacturing systems, which have all but removed the requirement to make major new capital investment for each new model, so becoming another contributor to the shorter model cycles now being experienced, down to around five years compared with eight-ten previously.

Yet more pressure is being put on the design function by the advent of new materials.

All these pressures are taking place against a legislative climate in which standards on emissions, safety and other design aspects have been proliferating at, for manufacturers, daunting speed. The accompanying chart provides some indication. When Ford launched its Cargo truck three years ago it complained bitterly that European type approvals generated ½m bits of paper.

The design process has become immensely complicated. Ford in Europe, for example, has as its Product Development Group an integrated operation employing 5,000 people at twin engineering centres in the UK and West Germany.

Ford is currently in the middle of a five-year plan to make the process easier with a $50m investment in extra computer services.

The same process has been going on at Austin Rover, which opened a new £5.2m design centre at Canley in February, where work on its joint executive car with Honda is proceeding under the direction of Mr Roy Axe, the British-born former design director of Chrysler.

He sets out Austin Rover's overall design goals quite explicitly:

"Our philosophy is to achieve a balance between all functional requirements coupled with an appearance that

CONTINUED ON PAGE VI, COL. 3

Advent of new materials

SOMEWHERE AT the beginning of his dream-turned-nightmare, John De Lorean was heading at least partially in the right direction:

As originally conceived, his gull-wing door sports car would have had an underbody of a foam-filled plastic composite to which all mechanical components would have been attached directly, as well as its stainless steel body panels. And in theory, the car could have lived on almost indefinitely, with the owner simply replacing mechanical bits as they wore out and fell off the virtually indestructible body. It was this theoretical longevity which prompted De Lorean, ironically, to christen it "the ethical car."

All other De Lorean problems aside, there were three fundamental flaws: the key, stress-bearing foam composite never materialised—a Lotus-style steel girder chassis was resorted to instead; the eventual underbody attached to this chassis provided little scope for the outer body panels to be changed in shape so that styling changes could be quickly and easily effected; and stainless steel body panels, while durable, were both expensive and would have needed high tooling costs to make styling changes.

Even so, with much detail disagreement about likely timing, costs and the most practicable plastic materials, the motor industry is starting to move slowly—but at an accelerating pace—down a similar conceptual road.

Thus at some point in the 1990s, the average family car may well have:

● A stress-bearing "skeleton" frame of aluminium, much lighter than steel and free of the hundreds of rust-creating galvanic cells automatically made by steel spot-welding;

● Attached to the frame, moulded plastic panels—created with such low-cost tooling that a large number of model variants can be created around the frame economically, and updated in a fraction of the current four- or five-year model cycles;

● Some highly-stressed engine internals may be made of plastics, if in the end they can prove cost-effective against another major alternative material now under intense development—ceramics.

Here and on the following pages JOHN GRIFFITHS examines new developments in materials, aerodynamics, electronics, engines and transmissions

Imperial Chemical Industries is just one of several large plastics concerns evaluating new thermoplastic composites for applications such as piston skirts and rings, timing chain gears, tappets, bearing shells and turbocharges impellors.

It is a road, however, down which individual manufacturers are not so much driving as being pushed—by consumer and legislative pressures for lighter, more durable and cheaper to run cars, and by the knowledge that if one maker does not take the plunge, a rival will.

For European manufacturers in particular, with mature domestic markets and export prospects dwindling, it is a road full of risks.

At the end lies the possibility of reduced sales through enhanced longevity, offset by an indeterminate extent by the sales-creating stimulus of a greater variety of models changed more quickly.

Along the way lies the prospect of making obsolete much of the robotic and other automated steel-manipulating equipment on which the industry has spent billions of dollars during the current race into flexible manufacturing.

As Mr Harold Musgrove, Austin Rover's chairman, com-

CONTINUED ON PAGE VI, COL. 7

VEHICLE DESIGN II

Route to significant fuel savings

Aerodynamics

JOHN GRIFFITHS

VEHICLE AERODYNAMICS do have a significant role to play in manufacturers' quests for fuel economy. At motorway speeds in particular, a vehicle which has a relatively low resistance to the air through which it is passing can produce significant fuel savings.

This is because the resistance of air to a vehicle goes up exponentially with the vehicles speed. In other words, at 60 miles per hour aerodynamic drag is not double that applying at 30 mph, but quadruple.

It is this factor which partly explains why, say, a 1.3 litre BL Maestro with about 70 brake horsepower can reach nearly 100 mph, but even a much sleeker Ferrari, Porsche or Jaguar needs nearly 300 brake horsepower to go about 60 mph faster.

In the past couple of years, some manufacturers have made much play of the "low drag" profiles of their cars as a marketing weapon: notably Ford with its Sierra, for which a drag coefficient, or Cd, of 0.34 was announced, and subsequently the Audi 100, advertised as the world's most aerodynamically efficient saloon with a Cd of 0.30.

But although Cd has become almost as much-quoted a figure for some cars as 0.60 miles per hour acceleration times, the drag coefficient does not tell the whole story.

The CD is a measurement of the factor by which a car's frontal area is reduced by means of streamlining. And since frontal area is itself a variable—theoretically the car's outline as seen at a point infinitely distant straight ahead of the car—no true measure of a car's resistance to drag can be made without taking both into account. In other words, those Cd figures can be misleading . . .

There is another factor, however, which makes manufacturers' preoccupation with aerodynamic drag understandable.

To arrive at the actual power needed to overcome it, the total drag forces must be multiplied by the air speed. In other words, the actual power needed to over come drag is not even quadrupled at 60 mph compared with 30 mph but multiplied by eight.

But as awareness of the complexities have become more widespread, there are signs that manufacturers are taking a more sober approach to the marketing exploitation of areodynamics.

Renault launched its 25 executive model earlier this year making little reference to the fact that with a declared Cd of 0.28, it could claim to have taken over the "most slippery" title from Audi.

BMW, at about the same time, was moved to declare that while it acknowledged the benefits of low drag shapes as a contributor to fuel economy, a low Cd should not be viewed as an end in itself—that other design aspects such as interior and running gear room, boot space and handling should not be compromised in pursuit of it.

A perhaps cynical viewed aired in some quarters about BMW's stance at the time was that it was a retrospective justification for the styling conservatism of its current 3 and 5 series cars.

However, considerable Press debate recently about the Sierra, in which its side-wind stability has been questioned as a poossible penalty for its low drag coefficient, has also helped throw into sharper focus the debate about the precise role aerodynamics should play in overall vehicle design.

If all other considerations except ideal shape were excluded, wind tunnel research by a number of manufacturers such as Volskwagen, Audi and Daimler Benz with their "Auto 2000" research cars, as well as Ford with its Probe IV and BL with its ECV 3 research projects, have shown that shapes with less than half the drag coefficent of the Audi 100 are feasible.

However, when due account is taken of practicalities — adequate accommodation, airflow-interrupting but vital items such as wing mirrors, and the inevitable gaps in wheel arches and so on — an industry consensus view is that average cars of the late 1980s will have Cds little significantly advanced from that of the Renault 25.

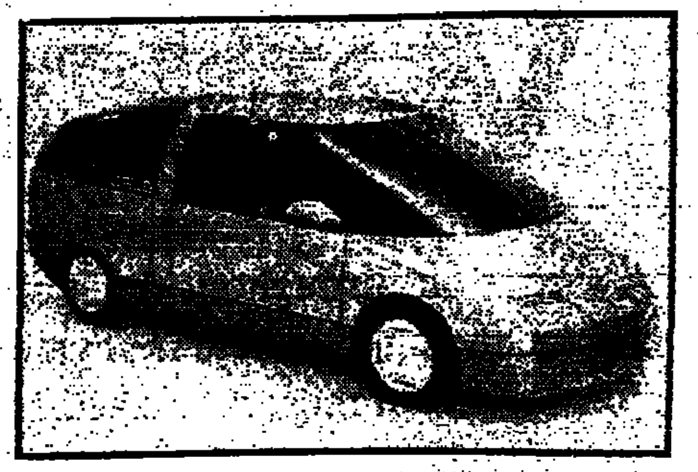
To take the Cd into the low 0.20s will require an altogether more complicated approach, involving features such as completely smooth, adjustable underbodies; suspensions lowerable at speed to further prevent under-car turbulence and completely enclosed wheel arches.

At what point these desirable advantages, in terms of fuel consumption, start to clash with consumer preferences in the form aesthetics, carrying capacity and so on remains unknown.

There is even a developing school of thought that priorities could change quite considerably, with the lure of carrying capacity relegating aerodynamics down the priority scale.

At Geneva motor show this year, Ford showed its Ghia APV concept car. Similar in length and width to an Escort estate, it seats seven and has 27 per cent more luggage capacity than the Escort estate, with the driver seated 20cms higher in its van-like body. It weighs only 1,088 kg, and such are the vagaries of aerodynamics that its quoted Cd is still only 0.33.

Forget about low, sleck bodies, suggests Mr Filippo Sapino, managing director of Ford's Ghia Operations—this is the shape that could well be "tomorrow's family car."



The Ogle Design Project 2000 car is "designed from the inside with people as the top priority, and shaped for efficiency on the road, 16 years ahead." Features of the 4-seat family car concept include good visibility, low drag with aerodynamic stability and a practical rear compartment with moulded gull-wing doors

Three main areas for development

Electronics

JOHN GRIFFITHS

IN 1981, General Motors put an on-board computer into every one of its models. Each was programmed with a maximum of about 1,500 command instructions.

By 1986, some of GM's cars will have seven computers on board, providing 38,000 command instructions, covering virtually every aspect of the vehicle's performance.

"Even so, we've barely begun to discover how many ways advanced electronics can be used in cars and trucks—the sky's the limit," Mr Roger Smith, GM's chairman, told a "Towards 2000" technology conference organised by the Open University in London last month.

As with many other industries, the challenge now for the motor manufacturers is to make intelligent, reliable applications of micro-electronics which are already more than sophisticated, small and light enough to cope with any demands that a vehicle might make of them.

In the hostile environment under the bonnet, the reliability factor looms large. But such is the progress already made that predictions that the engine bay would be a micro-electronics "no-go" area have long since been proved wrong.

There are three main areas into which micro-electronics divide:

- Driver information systems, covering such things as dashboard display and vehicle condition monitoring; for example, the "service mileage indicator" system launched on BMWs nearly two years ago;
- Engine management and drive train control, concerned principally—at least for the moment—with electronic ignition, fuel injection and carburetter management, and gear selection within automatic gearboxes for maximum efficiency;
- Systems which have yet to find their way into volume car applications, such as anti-skid braking mechanisms, modulated suspension systems—giving a variation in suspension settings between hard and soft—and programmable command functions to items such as lights and windscreen wipers.

The last item is the subject of much development and promises significant weight savings within the car. It involves essentially a micro-electronic "ring main" consisting of master computer with subsidiary control centres scattered about the car, and connected to the main computer via a multiplex "bus" line—a two-way information line.

Using it, the driver can both send instructions to turn signals lights, wipers, etc—but it can also be used, as BMW intends to do by 1986, to feed information to diagnostic equipment.

Ford is among several manufacturers working on prototype systems.

By its estimates, the average length of a conventional wiring harness — 19-20 metres — could be cut to three metres, and the number of wires in and out of the fusebox from 60 to two. There would be a weight saving of at least 60 per cent.

No less important, the dramatically simplified loom would be suitable for installation by robots — thus cutting out the risk of wrong installation, and removing electrical faults from their current position as one of the biggest contributors to warranty costs for manufacturers.

Typical of the increasing sophistication of engine microprocessor control systems is Ford's EEC-IV unit, now in volume production in the U.S. It can process 1m commands a second and is already in some production cars. In Europe, it is in use on a fleet of 50 prototype Granada "8X6" models, on which it controls the engine's ability to alternate rapidly between three and six cylinders depending on engine load. It reads all critical engine parameters, processes the information and changes the engine function in under 2.5 milliseconds. It requires only a microprocessor and a memory, both on chips less than ¼ in square.

It has enough capacity to control all Ford powertrain and fuel delivery systems throughout the 1980s.

In current usage it has much spare capacity — which will be used eventually to more effectively control peripherals such as air conditioning.

It will also have the learning capacity to keep the engine operating near optimum efficiency throughout its life, adapting for component variability, ageing or even failure.

It is the Japanese, however, who — under the impetus of a very strict legislative environment — have moved into the forefront of motor industry electronics. Toyota, in particular, has developed a "TCCS" (Toyota computer controlled system) in which engine and transmission electronics are linked to each other for maximum powertrain efficiency, as well as having built-in fault self-diagnosis, fail-safe and self repair functions.

Ford's vision for the family car of the 1990s

Engines and transmissions

JOHN GRIFFITHS

FORD'S PREDICTION of the family car of the 1990s is that it is likely to be powered by a small three-cylinder tubrocharged direct injection diesel with electronic engine management, driving through a continuously variable automatic transmission.

Such a transmission, or CVT, is already becoming reality —small Ford, Fiat and Sukuki cars with it are being launched and General Motors will produce a similar unit for larger cars from its Strasbourg plant within the next two years.

Engines are much more problematical. Dr Ulrich Sieffert, executive director of research at Volkswagen, for example, is rather more cynical about the arrival of direct injection diesels, suggesting that a more practical alternative would be supercharging as the next step on from the turbocharging of small, indirect injection diesels.

Such a system, he suggests, would provide a better answer than the lower power and higher cost which he says are the drawbacks to the 15 per cent better fuel consumption offered by a direct, rather than indirect, injection diesel engine. That view, however, has not dissuaded Austin Rover and Perkins from jointly launching such an engine in the Maestro and Montego next spring.

There are many other permutations of possible engines, including gas turbines for trucks —a real possibility, according to General Motors chairman Mr Roger Smith; petrol engines of light weight and using ceramic or plastic components, and even—Dr Sieffert again—"hybrid" units combing diesel and electric engines under the same bonnet which switch automatically for performance or economy.

What Dr Sieffert is convinced of is that there will be little in the way of electric passenger cars around the year 2000—at best, he predicts, they will account for 0.5 per cent of the car population. The situation with commercial vehicles is different, however. The UK motor industry has been first into commercial production of electric panel vans—from Bedford, Freight Rover, and Karrier Motors—with Bedford marketing director Mr Des Savage predicting a 10,000 a year market in the UK alone well before the century is out.

But as recent design changes and experiments have shown from several manufacturers, there is lots of scope yet to develop the conventional petrol engine.

A notable innovation this year was the launch by Alfa Romeo of a varinble valve overlap modification to its twin overhead camshaft engine range. Achieved by rotating one camshaft by means of a helical gear and spline, it has the effect of varying the engine timing, to provide improved performance across the operating range, as well as a fuel consumption improvement of up to 13 per cent.

VW is currently taking a different approach with similar objectives. It is trying out an engine with variable compression ratio. In this, the combustion chamber is split into main and ancillary areas, with the volume of the main combustion chamber made variable according to load conditions. The objective, again, is to get the best performance for given conditions.

VW is also being very active in the field of engines using methanol, and for nearly two years has been running a trial fleet of several hundred cars. So far, it claims to have found the cars to operate viably.

The reason for VW's interest is its declared belief that by the year 2,000, under oil cost and emissions control pressures, only about half of cars will still be using petrol. By then it expects 23 per cent of cars to be running on methanol—produced from coal—with diesel cars accounting for 15 per cent, LPG (liquefied petroleum gas) cars 6 per cent, and the balance, about 3.5 per cent (excluding electrics) made up by cars using ethanol produced from plants.

Sir Clive Sinclair is likely to disagree. The UK electronics innovator plans to launch a wholly electric-powered commuter car next year.

How computers open up ever-widening horizons

A MAJOR motor manufacturer already has the ability to design a car, display it in colour, view it from all angles and crash it—all on computer.

Increasingly, the computer's role is being taken several stages further. Austin Rover, for example, uses the same master database created in arriving at a car's specification for the creation of the tooling which will make it on the assembly line. Not too far into the future, the concept-to-tooling process will be completely computerised.

Gone are the days when the final design of a car was arrived at as the result of a grudging compromise between stylists and engineers. Design has become an integrated, multi-disciplinary function.

Gordon Sked, director of exterior design at the new £5.2m design centre opened by Austin Rover at the old Triumph plant in Canley in February, describes changes within Austin Rover which are being repeated, at varying speeds, within all manufacturers:

"Whereas with earlier designs, such as Mini and Maxi, the main thrust in the production of the package was within product engineering, now we in this (design) office are totally involved with engineering, in ensuring that the package complements the creative scope of the designer without eroding the goals.

"We have become rapidly aware of the need to consider a more rational approach to replacement models with particular regard to investment, rationalisation and flexibility of our existing and planned production facilities.

"This creates a significant challenge to the designers in the creation of a complete model range with sufficient differentiation from each other, but with the maximum degree of rationalisation in their manufacture."

In all its forms, Mr Sked points out, new technology has obvious benefits in the manufacturing process. "But it is also playing an escalating role in ensuring that the designer's work is translated through all the engineering and manufacturing processes to a showroom product which is true to the designer's intent."

With it, however, goes a much increased responsibility for the designer, as the originator of the database. He has to be sure that information released for production is accurate—if not, subsequent changes are liable to be expensive in cost, quality and time as they stretch further into the production processes.

The risks, however, are greatly outweighed by the advantages—not just in more efficient use of design time but in the co-ordination, via the database, of all the various operations providing input to the finished car.

This design process is also spreading outside of the manu-

Manufacturing systems

JOHN GRIFFITHS

facturer's own facilities. Slowly, but surely, component suppliers are being brought into the equation: using compatible computer equipment, they too are increasingly being plugged into the same database so that subcontracted component development and tooling forms part of the overall model design process.

With a multinational, producing cars on a world scale, the communications process becomes even more complex:

In May, Ford is to start an eight-month trial of satellite TV communications for its engineers. The plan, outlined by Ford of Europe's new president, Mr James Capolongo, is to allow groups of engineers in the UK and West Germany to talk to each other and examine parts by TV, using new technology which reduces video conference costs to about a tenth of traditional levels.

That is just the latest move in a very broad programme, however, for Ford is roughly at the mid point of an ambitious, five-year plan to increase five-fold computer services to its designers and engineers at a total cost of over $50m. Some 400 terminals are already in use, linked within Europe—where Ford's Product Development Group is integrated at twin engineering centres at Dunton in the UK and Cologne in West Germany—or with the mainframe computer in Detroit.

By the same token designers and engineers at Bedford Trucks in the UK, now part of General Motors' World Truck and Bus operation, are linked with the headquarters at Pontiac, Michigan, as development goes on of the new "world" commercial vehicles planned to be built by GM from the late 1980s.

The need for the co-ordination was underlined recently by Mr Roger Smith, GM's chairman: because of rapidly intensifying competition, the day when innovation could be phased in, with new technology being thoroughly developed on one model before being applied across the board, are over, he said. "If manufacturers are to succeed—indeed, to survive—the cars and trucks of the future must be state of the art and they must be built in the factory of the future."

In this context, design is not simply a matter of the vehicle.

In the U.S., GM is gradually putting together "Buick City." The idea stems from the "just in time" inventory systems of the Japanese motor industry, involving satellite component factories within a short distance of the assembly plant. It forms part of what Mr Smith describes as the "revolution going on in manufacturing technology; materials handling; the way factories are laid out and put together."

And within the assembly plant new systems for assembling cars, involving a major redesign of the car itself, are being devised.

GM is at the centre of this activity with Project Saturn, a Cavalier-sized car it plans to have on the road by the late 1980s.

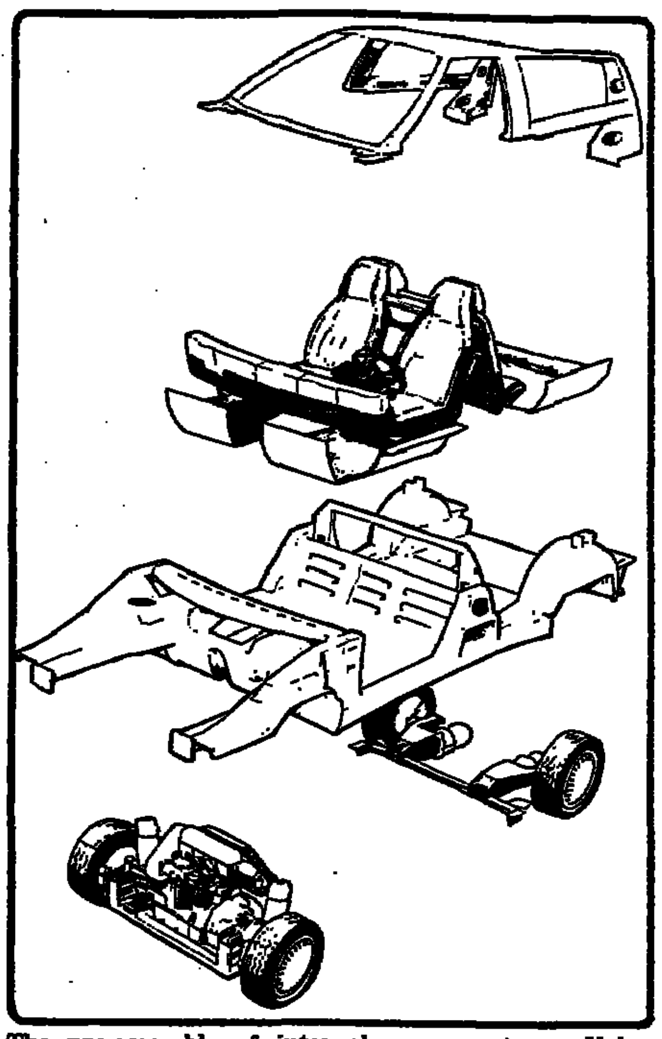
The car will have the expectable improvements in terms of lighter weight, aerodynamics and so on—but more crucially, it is designed to be assembled in modules, including the interior trim—thus cutting out the last labour-intensive area, final assembly, which is also the most prone to human error.

That in turn means redesign of the assembly line. It will become much shorter, says Mr Smith, and it will be flanked by many more "feeder" lines putting in sub-assemblies.

All this is expected to go hand in hand with increasing robotisation and other automated equipment.

Volvo is working very much on the same lines, as indeed are most other manufacturers.

One tangible result is Volvo's



The pre-assembly of internal components, as Volvo points out, could even be carried out by suppliers

Light Component Car (LCP 2000) unveiled at the end of last year. Much of the work was carried out by outsiders, notably International Automotive Design at Worthing in the UK.

The terms of reference were to establish the demands that would be placed on a car by the year 2000. The group was required not just to come up with a car design, but one that could be volume produced in the most efficient way. IAD and its chairman, John Shute, were responsible for the styling concept, feasibility engineering, a large amount of the body engineering, the detail design to complete the interior and a considerable number of other items.

One major result can be seen in the accompanying drawings:

Virtually the entire cabin section, with its difficult-to-handle soft trim, mates to the rest of the car as a module. This pre-assembly of internal components, Volvo points out, could even be carried out by suppliers, such as the manufacturer of the injection moulded components.

Again, this is just one aspect of the design element leading to major production line changes. And it can have profound impacts in financial terms, too.

A good example is provided by Fiat's Uno. Fiat has spent some $4bn in the past four years on motor industry investments, about a third on developing new cars, the rest on automation and robotics. By matching the car design to the enhanced manufacturing capabilities, the Uno emerged larger and much more sophisticated than its 127 predecessor, but with about 100 fewer body parts, and not much more than half the spot welds—only 30 per cent of them applied by hand. As a consequence, it was far cheaper to build, and it is no accident that Fiat is back making profits.

Electronic drawing board brings major benefits

GREAT strides have been made since the vehicle industry started to consider computer-aided design (CAD) in the mid-1960s. Investment has been considerable—Ford alone has spent $100m.

There are three significant benefits: new designs can be put on the market more quickly, design quality can be improved, and draughting productivity can be increased—although manufacturers' claims have been prone to exaggeration.

How does it work? In its simplest form, CAD is just an electronic drawing board replacement, with memory. Instead of using paper and pencil, the designer uses a keyboard or "light pen" to "draw" the same lines on the face of a TV tube.

The picture is built up (as in television), from a single spot scanning many horizontal lines one under the other at various intensities and colours. The complete picture results only from the human eye's persistence of vision.

In CAD, a controlling computer tracks this spot and knows exactly where it is at any time. When the light pen is pressed against the screen, its light-sensitive tip registers when the spot passes. The computer then immediately knows where the pen is positioned, marks the point on the screen, and remembers it. As further marks are made, they can be joined up by the computer to produce straight or curved lines, and so any kind of outline.

The important aspect is that when all these features are drawn, the computer's storage remembers everything about them. By depressing a few keys, anything that has ever been drawn can be retrieved and put up on the screen. Time saving can be enormous because as the months go by, a library of standard shapes and parts—ones that a designer will use over and over again—can be extracted from the computer's memory and "inserted" into the new design, perhaps with some minor modifications.

Since the computer can be given three-dimensional instructions (the equivalent of plan, front and side elevations of a drawing), it can, by doing some mathematical transformations, produce a view from any angle the designer chooses.

In more sophisticated systems the software allows a 3D solid colour model, with definition not far short of a colour photograph, to be "opened up" to see what is inside. With systems like this, separate component parts can be designed and then assembled on the screen.

Even cleverer software can allow the observer to "go inside" the object. In the case of a car, assuming that enough dimensional data about its interior is in the computer, the designer can "get into" the car and see the view from one of the seats.

Computer-aided design

GEOFFREY CHARLISH

Remarkable as that might seem, a combination of two other techniques, animation and finite element analysis, allows known impact forces to be "applied" to the front of the car and the resulting deformation observed. The car can be "crashed."

At a more down-to-earth level CAD allows not just the shell shape but also the components such as doors, panels, bumpers and bonnets to be separately designed, dimensioned and fitted into the shell. Tests can easily be made for interference of one part with another.

The total information in the computer's memory is known as a database. What most of the car makers are working towards is the extension and use of this database into areas beyond draughting, namely engineering (CAE) and manufacturing (CAM).

In CAE, the primary dimensional database is enhanced with other engineering information such as the mechanical, thermal and kinematic properties of the materials used. Then, the designer can use "what if" approaches to discover when a component will buckle, or the effects of heat or momentum, for example.

In CAM, computer-aided manufacturing, the database is used to generate the data needed to make the part. A common application is producing the numerical control tapes used by machine tools, often with on-screen verification of cutter paths — for making tools, moulds, dies and deciding associated machining strategies.

Eventually, there is no doubt that CAD, CAE and CAM will come together with other manufacturing computing to give computer-integrated manufacturing, CIM. There will be one comprehensive database that will know all there is to know about the product, the machines that make it, the sales orders, costings and so on. Then each element in the design, engineering and manufacturing complex can be provided with just the data needed to do its job. It is a gigantic software proposition, but that is the way things are moving.

CAD is already a $1.5bn a year business involving majors such as Computervision, IBM, Intergraph, GE (Calma and CAE International), Applicon, McDonnell Douglas, Autotrol Hewlett Packard. There are perhaps 100 companies in all offering CAD products.

Computervision for example, has installed four Designer systems with 24 graphics workstations throughout the Longbridge design offices of the BL Austin Morris group. Applications include NC, electrical wiring and mass property analysis. The Jaguar plant in Coventry has a six workstation system and there are another eight at Landrover, Solihull.

BL Systems has overall responsibility and systems development manager Bryan Claydon puts productivity gains at between three and four times. But he admits that getting all the existing data into the computer in the first place has been very time-consuming. So new designs have first priority.

Ford has no fewer than 440 workstations throughout the world, with satellite data links that allow designers to exchange ideas. The system, called PDGS (product design graphic system), has been developed over 16 years and world marketing rights were granted to Prime Computers last year.

General Motors' systems, called GMSolid and Colourstress, allow solid-looking representations of parts to be assembled on screen and the stress patterns of say, a car body, to be viewed as coloured areas.

VEHICLE DESIGN IV

Innovators face rising frustration

UK

JOHN GRIFFITHS

LOTUS ENGINEERS have developed a computerised suspension so advanced it combines luxury car ride with racing car handling. It will lean the car into a corner like a motorcycle if asked, and will run over a brick at 90 mph with the driver feeling nothing and with no damage to the tyre.

However, it will appear in its first volume car application with a non-UK car maker. "We spent months talking to people in the UK," says managing director Mr Mike Kimberley. "But the impression we got was that while they might like to do it, they didn't have the funds."

At last month's "Drive Forward" exhibition at the Design Centre in London, staged to promote British design, Tom Karen stood by inwardly fuming while Mrs Thatcher sat at the controls of multi-national Ford's van-like seven-passenger "concept car" for the 1990s. A few feet away, Karen's own concept car—in very similar vein—remained on paper.

"About 10 years ago I was predicting that cars would go this way. I tried to get UK industry, financiers and the Department of Trade interested. I didn't even get to first base; no encouragement—nothing."

Tom Karen is not an unknown, aspiring designer, but head of the Ogle design consultancy which itself has won several Design Council awards.

At the same exhibition, Merrick Taylor stood beside Motor Panels' award-winning Hemi Tech truck cab which will take the Rubery Owen subsidiary of which he is managing director into the 1990s.

He says: "We have simply got to get changed attitudes, not just within industry but from banking, Government, the Treasury—and it's not a question of a helping hand or lame ducks.

"The main problem of bankers not seeing what is self-evident is that they have had such a long period of the UK being non-competitive. One thing is the out-of-date concept of collateral, and the tightening of controls on the basis of shrinkage.

"But if we took the opposite viewpoint—what should be done to increase the collateral; trying for once to start thinking beyond the next balance sheet and addressing the long term—then we might start getting somewhere.

"As things stand, it sickens me when you get the banker who lectures UK industry about cost-effectiveness; about the need to be competitive and generate profits — and then when he's finished he goes out and climbs into his West German-built Porsche."

These comments, from chief executives of three companies whose design, innovation and engineering reputations considerably exceed their physical size, are just a few of the outward signs of anxiety, frustration, even anger, building up among the UK groups concerned with design, innovation and its utilisation in UK industry.

Behind these concerns, increasingly, is the fear that, if current attitudes do prevail, there is little which will prevent UK industry, in the longer term, slipping further and further behind in international competitiveness, as technology-based rivalry increases.

These concerns have a number of facets; broadly, they include:

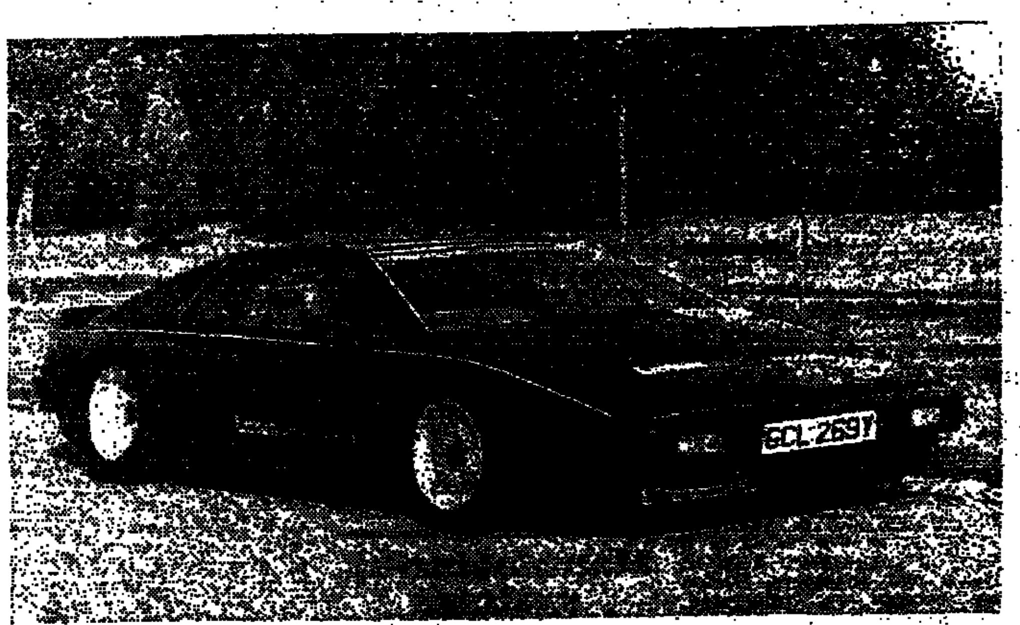
A harshly critical attitude towards the financial sector. It dismisses as so much hyperbole the sector's claim that there are large amounts of venture capital around waiting to be directed at sound, innovative projects;

An almost as critical view of much of the UK motor components sector. The criticisms take the shape that the sector simply responds to demand, with few attempts to innovate on its own behalf or market any self-developed innovations aggressively.

The consequence is that much design, research and development work undertaken in the UK sees the light of day as actual products only when they have been bought up and put into production by foreign manufacturers.

There is a view also that the various supportive schemes for design and innovation hatched by the Department of Trade and Industry are, in fact, off-target and simply not leading to adequate exploiting of the UK's design and innovation talents.

That these talents exist, and in abundance, is not in doubt: the design and advanced engineering departments of leading auto manufacturers overseas—not least Porsche, Audi and BMW—have at their very top UK-born and UK-trained designers and engineers who have despaired of the low pay and low status accorded them in the UK.



Lotus: luxury car ride with advanced computerised suspension

It provokes Dr Nigel Chapman, director of the Royal College of Art's world-respected automobile design school, to describe the situation as "a tragedy bordering on the criminal."

There exists also a view that the role played by the UK's Design Council itself is in some respects misdirected; that its promotion of UK design is at an altogether too academic level, rather than geared to helping the hard sell in markets in Europe and overseas.

Not least, some innovators are ready to be critical of themselves:

"As designers we have failed," says Tom Karen. "We are not articulate enough; not good enough at knocking on doors. Our design society has failed. The Design Council says it is just interested in encouraging design. If they promoted the design industry, like footballers, like superstars, it would be more effective. There's little active promotion.

"But the Italians do it loudly enough; if you took the trendy design image away from the Italians what would you have—not very much."

"But we in the UK tend to take the professional approach—we're too proud to do something common like touting for work."

As always, it will be possible to point to exceptions to these generally stated views. Just one case in point is the development by GKN Technology of a world first: composite glass fibre springs for trucks which save weight and are safer than steel springs, and promise to reap GKN a rich financial harvest world-wide over the coming years. More innovations are expected to come from its just-opened £7m research and development centre in the UK.

There is an exception, too, in the development by Lucas and Chloride, in association with UK truckmakers, of the world's first commercially-produced electric vehicle.

But equally, the malaise can be seen in the irritation of Austin Rover with some of its component suppliers, and chairman Mr Harold Musgrove's statements that without price and quality improvement, 45 per cent of its components, not the current 15 per cent, could wind up being purchased from abroad.

The contrast between the UK situation and the long-term "partnership" operations of Japan—where banks, industry and the Ministry of Trade and Industry co-ordinate long-term strategies with little concern for immediate profit—is not only ironic but downright dangerous in terms of the UK's ability to stay in the race, Merrick Taylor observes.

Fiat relies on outside designers

Italy

JAMES BUXTON

COMPUTER-AIDED design is transforming the way cars are designed, but will not change the fact that Fiat, the major Italian car maker, relies heavily on outside designers when it is developing a new car. That is the view from both manufacturer and designer in Turin, the heart of Italy's motor industry.

The presence of Fiat in Turin and its extensive use of outside designers helped establish the city as one of the major centres of car design in the world. Four companies, Italdesign, the company of Giorgetto Giugiaro, Pininfarina, Vertone and Ghia, part of Ford, are flanked by a host of smaller, artisanal concerns.

The success of Italy's car designers is usually attributed to the combination of the Italians' natural flair for creating the beautiful and the practical with the artisanal tradition of the small, highly-skilled workshop. It is this that attracts other European car manufacturers to Turin and its designers, and which Fiat particularly values as it plans models for the future.

Computer-aided design (CAD) enables a designer to visualise and simulate problems and solutions in car design in a way never before possible. It therefore speeds the time in which the technical parts of cars can be designed, and also gives greater importance to accurate calculations of air drag coefficients, a crucial point in an energy-conscious world.

All this work can be done in the car manufacturer's design department — in the case of Fiat, in its styling centre. But according to Fiat, the very advantage of CAD makes the use of outside designers even more necessary.

"Everyone is applying these design methods, and that makes things much more competitive," said a company spokesman. "It is therefore all the more important that we produce what the market actually wants. And that is why we go to outsiders for help with styling."

According to Giorgetto Giugiaro, head of Italdesign, the advent of CAD will mean at least as much work for outside designers as in the past. "Companies may do more designing in-house," he says, "but things have become so competitive and design is moving so fast that the lifetime of the average car design is much less than it was. Therefore the car manufacturers will need new designs more frequently."

"The lifetime of the average car that has been introduced in the past two years is six or seven years, compared with ten or 12 years in the past. Therefore, companies are going to be needing new designs all the time, from as many sources as possible. We are at an advantage because as a small company we can produce a complete new design in about two months less than a big manufacturer can. We can hand over a scale model in three months, instead of about five.

"CAD is quite useless for styling research," says Sig Giugiaro. "We will be getting it in due course, but it is expensive and when you only need it three days a month for engineering research, it is often cheaper to go to a specialist concern in Turin and use theirs."

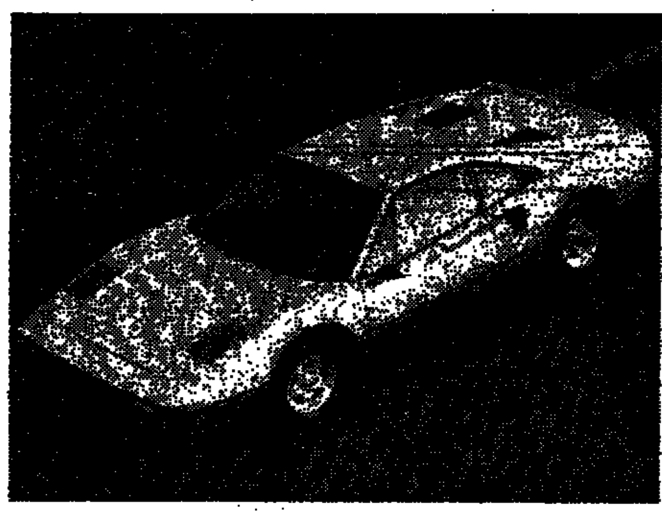
For Fiat, "the asthetic aspect is absolutely crucial. The designer must also be able to plan a family of cars, so that the life of the car can be prolonged."

Italdesign was responsible for designing the Fiat Panda, the utility car with its distinctive high body. According to Fiat, the Uno, the highly successful replacement of the Fiat 127, was "born at Fiat with recourse to outside designers including Italdesign." Italdesign is a little more proprietorial about its own role in the paternity of the Uno, and the car has a certain external similarity to the Panda.

The Flat Regata the recent replacement of the 131 Mirafiori, is largely a product of company's own styling centre.

The roles of the different car design houses is changing, as Fiat sees it. Italdesign is perhaps the company most adapted to the design and production needs of the big car company. That may help to explain its success, which began when in 1968 it won the contract to design the Alfasud, to be built in the state-owned Alfa Romeo company's plant near Naples.

Under Giorgetto Giugiaro it then designed the Volkswagen Golf and its fellows the Passat and Scirocco, which enabled the West German company to retain its place in car markets as the Beetle was withdrawn. Italdesign's roll of honour includes several Japanese cars, models for Lotus and Maserati, and the Lancia Delta and Prisma. Lancia's new large saloon, to be launched by the Fiat subsidiary later this year or early next, is also an Italdesign project. But Volkswagen preferred to build its own designed "born-again" Golf in preference to Italdesign's completely new version.



The 308 GTB Ferrari, as designed by Pininfarina, which recently returned dramatically to the headlines with news that it is to deliver 40,000 bodies for a Cadillac car to General Motors from 1985 to 1991 —a deal worth $600m

Pininfarina recently returned dramatically to the headlines with the news that it is to deliver 40,000 bodies for a Cadillac car to General Motors from 1986 to 1991, a deal worth $600m. This spectacular contract, which will double the Turin company's turnover, also entails flying the car bodies from Turin to Detroit, to prevent the damage that would occur were they to go by sea.

The deal also emphasises the way in which Pininfarina is increasingly a manufacturer rather than simply a designer of cars, and that its design niche is in the specialised part of the car market rather than in the mass production models that Italdesign is strong in.

Pininfarina has designed the new four-wheel-drive version of the Alfa 33 and the estate car version of the same car. It is responsible for such cars as the Peugeot 205, Rolls-Royce Camargue and the Talbot Samba Cabriolet.

In the U.S., Pininfarina's name is now on the former Fiat Spider, which it manufactures for Fiat. Fiat decided last year to take its own name out of the U.S. car market. Similarly, the Fiat X1/9 is now called the Bertone X1/9 after its designer and manufacturer.

How Europe's consultants keep styles up to date

Japan

JOHN HARTLEY

JAPANESE VEHICLE manufacturers are reluctant to admit that they use outside consultants, but they are always seeking new styles and new technology, and verification that their work up to date.

Their reluctance stems from three main reasons—the industrial environment, their ambitions and their past experience. In Japan, it is the large companies that tend to lead in technology and so industry executives find it difficult to admit that they have to use a smaller, and by their definition, inferior, company for design.

Then, the Japanese vehicle manufacturers are still trying to show that their design technology is equal to that of the European companies, so again, they are reluctant to admit that they need to use outsiders to catch up.

In addition, Nissan suffered some damaging publicity following a dispute with Albrecht Goertz, who worked as a consultant on the design of the car that inspired the 240Z. There was a disagreement about Goertz's contribution to the 240Z and, although the matter was settled privately, neither Nissan nor its competitors want a repetition of that episode.

Nevertheless, Goertz was responsible for the styling of the original Silvia, while Pininfarina of Italy designed an early Datsun Bluebird. Toyota relied on American stylists for some versions of the Celica and Mazda's original Luce was styled in Italy.

More recently, Isuzu employed Ital Design to style the Piazza coupé and then the 1.3-litre "R-Car," due to be launched later this year. In addition, Honda has commissioned Pininfarina to carry out some design studies and Ital Design certainly influenced the design of Nissan's Micra.

Overall, though, there is a tendency for the Japanese companies to commission the Italian styling houses to carry out design studies for a certain model. Subsequently, the stylists inside the company modify the design—often turning an original design with character into the bland and characterless shapes for which the Japanese are renowned.

It was to avoid this sort of transition to mediocrity that Isuzu left Ital Design's Piazza almost exactly as Ital Design executed it. The result is that the car has real identity, especially in Japan where most cars tend to share the same basic styling characteristics.

Of course some specialists, especially in diesel engine design, are consulted regularly by Japanese manufacturers. For example, Ricardo Consulting Engineers of Shoreham-on-Sea, England, numbers most of the Japanese companies among its customers, partly owing to the almost universal acceptance of the Comet Mark V swirl chamber system on small Japanese diesel engines.

However, the Japanese are always very keen to know what their rivals are doing, and by communicating with an establishment such as Ricardo, they keep in touch with trends.

Honda has a more open attitude to consultants than most of the Japanese companies, not least because it has a history of developing its own technology but going elsewhere when it lacks experience. For example, it was not until Honda's V-12 racing engine was put into a chassis designed by Eric Broadley of Lola Cars in England that Honda won a car Grand Prix. Now Honda has returned to the race tracks, but from the start has supplied engines to British racing teams who of course build their own cars—a highly specialised area.

Mazda MX-02 concept car

Foreign imports lead to changes on home front

IN THE flamboyant 1950s, when Detroit's car manufacturers seemed to be unable to put a foot wrong, the design studios carried enormous weight in the different organisations. Cheap fuel and good roads had produced the fashion for big cars and powerful engines.

The job of the designers was to clad this relatively unchanging concept of what a car should be with a shape that would catch the fancy and hold it long enough to make money, before fashion moved on to some further extravaganza.

At that time, the big three U.S. manufacturers had great confidence in the validity of their own judgment. Apart from Volkswagen, no one from outside the country had been able to make any substantial impression on the U.S. car-buying public.

In 1973, however, everything changed. As oil prices set off on the meteoric climb that was to last a decade, they began to see the need for adapting their models — and it soon became a necessity as the Japanese began to hammer home the message that U.S. customers were not totally mesmerised by size and power.

These new perceptions of the industry were to spell a long period of eclipse for the U.S. designers. They had gained their position in the first place because their ideas were powerful selling tools. Suddenly, as oil prices began to take off, other factors began to look equally important in the market place, particularly fuel consumption.

The main focus in Detroit turned to engineering, as the manufacturers concentrated on reducing engine size, taking weight out of the cars, and shrinking them in overall capacity. Design had to take second place to the "down-sizing" crash programme, with the result that U.S. cars became distinctly less interesting — or flashy — to look at.

General Motors, for example, had developed its overpowering presence in the market by standardising engineering as much as possible across its five divisions, while ringing the changes in its styling. Over the past few years, by contrast, it has been heavily criticised for producing relatively similar-looking vehicles across the whole of its range.

Following this down-sizing period, however, the wheel is turning yet again, back to a re-emphasis on design. This is mainly because the main thrust towards investing in smaller cars is over. But it is also due to the increasing threat from foreign cars, which have won wide acceptance despite the fact that their styling is radically different.

The U.S.

TERRY DODSWORTH

One response of the U.S. producers has been to draw on their design offices in their European subsidiaries, although this process is now on the wane. Another, though limited, approach has been to buy in European styling as Cadillac, the GM subsidiary, did recently for a new sporty version of its model range.

The most radical departure, however, is the establishment of new, separate design offices in California. This policy is related directly to the growth of Japanese car sales in the U.S., because it was via California that the Japanese won their entrée to the wider national market. Californians have proved enormously receptive to overseas styles, to the extent that imports now have just over 50 per cent of the market in the state.

For far too long the U.S. manufacturers, based in the north-eastern industrial belt, failed to respond to this challenge 2,500 miles away on the West Coast. The popularity of the Japanese, and other importers, was dismissed for a time as yet another Californian fad. But it has now become apparent that West Coast fashion has given an effective insight into the trend for the whole country.

Indeed, the Japanese recognised the importance of Californian taste several years ago. As early as 1974, a number of Japanese car companies established design studios on the West Coast to soak up local ideas and test market new models.

Out of this process have come the more stylish vehicles which have replaced the severely utilitarian and economical models which established the first Japanese bridgehead in the U.S. Indeed, the Datsun 280Z, probably the best-selling sports car the world has seen, owes its inspiration to the company's efforts to tap into the Californian scene. Similarly, the Toyota Celica and the Mazda 626 are regarded as Californian prompted cars.

Last summer, Chrysler followed in the Japanese footsteps and opened a $3m studio near San Diego, to be followed by GM, which has now established a Californian think tank at Thousand Oaks, near Los Angeles. Chrysler intends to develop full-sized designs in the design office, although GM is going more cautiously and will use its own studio to get a feel for the local market rather than producing usable production designs, at least for the time being.

Development secrets boost car industry mystique

SURROUNDED BY fields and woods, Porsche's motor vehicle development centre at Weissach in southern Germany is a hive of activity. The pace of expansion at Weissach has been so great that the hammers and drills of building workers have been ringing out more loudly at times than the sound of motor vehicles.

The spur to expansion has come not only from Porsche's own design and development projects but also from an increasing volume of contract work for outsiders, notably other vehicle manufacturers.

The bulk of the activity at Weissach is aimed at enhancing Porsche's own range of prestige cars. But between 30 and 40 per cent of the operation is taken up with projects for other organisations.

Porsche is among the most prominent of West Germany's consultant firms and experts engaged by the motor vehicle industry and components suppliers to handle technical design and development work. Like other large engineering groups, it receives considerable business from abroad, though mostly from within Europe.

West German motor vehicle manufacturers—and the various design and engineering outfits who work for them—are reluctant to disclose details of any interdependence. The volume of outside work in any case varies, with some companies, such as Daimler-Benz, aiming in principle to handle work within its own organisation.

Secrecy inevitably pervades a lot of design and development work and has become part of the mystique of the car industry. Security is not merely an effort to keep the competition guessing but also to avoid raising expectations among customers about innovations, with possible market repercussions.

However, outside designers and engineering consultants are a significant sector in West Germany and although much work is short term, some companies have long-standing relations with vehicle and component manufacturers. Among engineering consultant groups, a liberal sprinkling of key personnel are English or experts with English engineering and motor vehicle experience.

With car manufacturers moving increasingly into computer-aided design (CAD) and beyond that to computer-aided manufacturing (CAM), the outside specialists are currently confronted with the need to move with them in this direction.

The trend to CAD seems indisputable, but it is a headache for outside consultants — not simply because of the investment and training required but also because of the different systems which car manufacturers have introduced. There is some hesitancy for fear of taking a wrong step and some rather forlorn discussion about the desirability of compatible systems.

W. Germany

JOHN DAVIES

For reasons of secrecy and pride, the role of the outside designer and developer is apt to go unacknowledged or overlooked by all but the initiated in the industry. However, an instance of perhaps mutually beneficial acknowledgement occurred recently when Seat of Spain presented new engines and gears developed with the help of Porsche. Seat broached the subject with Porsche in 1981 and the contract was completed to Seat's basic requirements in time for presentation at the Geneva Autombobile Salon earlier this year.

Porsche is also known to have carried out major work for the Soviet Union's Lada car project, as well as the development of a new Formula One engine.

Porsche's revenue from outside design and development work — so-called Fremententwicklung — reached DM 80m ($30.8m) in the financial year to last July 31, and is planned to rise to about DM 86m-DM 90m in the current financial year.

About 80 per cent of outside work involves motor vehicle projects, in keeping with the vehicle development tradition of the group dating back 33 years.

Herr Horst Marchart, responsible for development and sales of Porsche's external projects, says the company plans to step up investment in Weissach to about DM 135m next year. Investment projects undertaken include a wind canal and an environmental centre.

Since the company set up the Weissach centre in 1972, the spot has been a virtual "building site," with new expansion continually under way, says Herr Marchart.

The number of employees in development work is also being steadily increased, rising from about 1,000 around 1979 to more than 1,800 at present. If the pace of expansion continues, the number will shortly reach 2,000.

Herr Marchart sees considerable opportunities for technical design and development work in the next few years, partly because of new standards likely to be brought in for motor vehicle manufacturers.

The company's longer-term goal, he says, is to raise the proportion of outside development work to about 50 per cent of Weissach's operations. So far, the volume of outside work has been rising steadily but so, too, has Porsche's development work for its own projects.

Herr Marchart says that Porsche is introducing CAD, recognising the potential benefits as well as the need to keep pace with the technological practices of customers. But incompatibility of systems is a headache. "Almost every car manufacturer has a different system," he says. "That make things difficult."

Other engineering design and development concerns are becoming increasingly interested in CAD, feeling pressure from manufacturers to move in this direction.

"We know we are going to have to move to CAD," says Mr Terry Wolkind, an English senior executive of Rucker, the engineering concern.

Rucker, which employs about 450 people, has shifted the orientation of its projects increasingly from mechanical engineering to automotive engineering. About 85 per cent of its efforts now involve automotive projects.

Its nine offices are based strategically close to motor vehicle manufacturers and component suppliers — in such centres as Stuttgart, Munich, Inglostadt, Wolfsburg and Cologne.

More scope for specialist car assemblers

VEHICLE DESIGN is an art—and one which will allow greater opportunities to the medium-sized and specialist car assemblers over the next decade, according to Mr Dan Jones, one of the leading figures in a four-year international study co-ordinated by the Massachussetts Institute of Technology into the future of the automotive industry.

The project—financed by the major car producing countries: the U.S., Japan, the UK, West Germany, Italy, France and Sweden—involved 100 researchers across the world. Three closed conferences were held at which the views of governments, leading industrialists and trade unions were sounded.

Mr Jones, of the Science Policy Research Unit at Sussex University, is one of the five authors of the book to be published this autumn of the study's conclusions.

He says the findings "stand on their head" the conventional views of the automobile industry under which economies of scale squeeze out the smaller assemblers and mergers lead to the creation of "a few surviving mega-companies along the lines of General Motors."

The differing markets for cars, emerging new components and the changing technology of production dictate otherwise, he argues. The concept of "the world car"—a vehicle using common components but with cosmetic changes to suit the particular national market—was being undermined by the individual demands of domestic markets.

The divergence rather than convergence of demand presents great potential for the medium-sized producer. Research suggests the smaller companies are more adept at seeking out a niche in a fragmenting market, Mr Jones says.

"This is exemplified by the European specialist producers—Volvo, Saab, Daimler-Benz, Jaguar and by Chrysler in the U.S. and Honda and Toyo Kogyo in Japan."

Austin Rover is actively moving in the same direction, adds Mr Jones, who has recently completed a study for West Midlands County Council on the prospects for the motor components industry in the region.

He maintains that, in contrast to the past 20 years, a whole range of technologies are now being incorporated into the design of cars. Spending on research and development, coupled with advances in fields such as electronics and new materials, means "a huge shelf of technical alternatives" are currently available to the automobile designer.

Medium rank manufacturers

ARTHUR SMITH

The new ideas are likely to be introduced but gradually. The result will be the same: "The car of the early 1990s will be completely different in almost every respect to the car of the early 1980s."

Mr Jones argues that it is the very pace of the present technological evolution of every part of the car that makes vehicle design an art. It was impossible to predict what the winning combination of all developments would be.

Such an environment provided enormous scope for many different producers to create quite distinctive cars by "picking off unique combinations of new technologies."

Nor was there any reason to believe that all the cards were in the hands of the very large companies with huge resources at their disposal. As in the past, many of the important advances would be introduced by the smaller and medium-sized assemblers.

But the biggest factor to change the prospects of the lower volume operators has been the recent revolution in production technology and the advent of flexible manufacturing.

The new flexibility has overturned the conventional wisdom that an assembler needs to produce at least 2m units a year to be viable.

As Austin Rover is now beginning to illustrate its facilities at Cowley, Oxford, a full range of models can be produced at one or two plants at a much lower total volume and still remain competitive.

Mr Jones argues that the changes in production technology are only just beginning and that more are in prospect. The economies of scale in design are also changing with the growing use of computer-aided design, engineering and manufacture.

The "art" of the designer became that much more crucial in a period like now when all the major elements of competitiveness in the automobile industry—the markets, product, production equipment, and management strategies — were in a state of flux.

Mr Jones forecast that most of the existing medium-sized companies will survive the next decade although it could be "precarious and testing." The two major problems to be overcome were volume of output—still critically high in engines and gearboxes—and size—the smaller companies were at a disadvantage in financing a wide development programme.

The answer to such constraints lay in a mixture of buying-in some major components, joint development and procurement, co-operative design, and a substantial reliance on the acquisition of technical knowledge from outside companies.

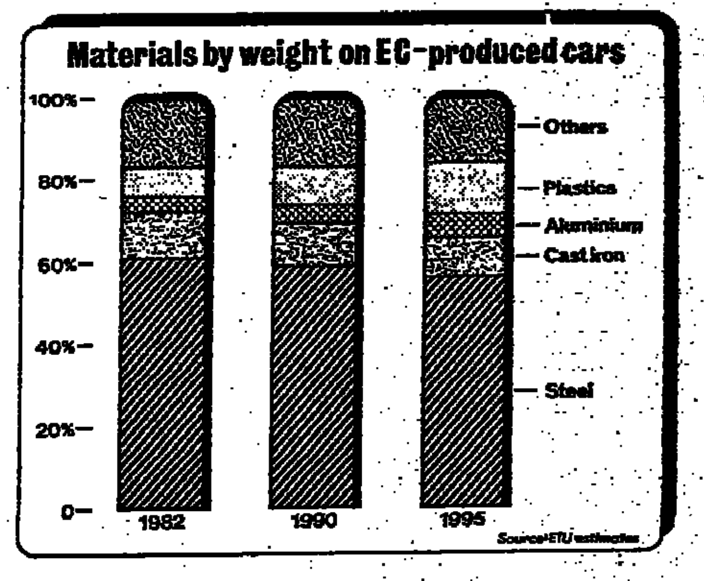
"In other words, one has to trade in one's weak areas," Mr Jones says. But to be successful, companies needed to retain a strong engineering capability to make the correct technical choices, whether in purchasing or in absorbing outside technology.

Perhaps the best topical example of how a low volume producer must build upon its strengths in a particular market niche is Jaguar, the BL luxury car subsidiary soon to be privatised.

With total output of about 30,000 cars a year, although capacity is being increased to 45,000, Jaguar is small even by comparison with its main competitors, BMW and Mercedes. But the company believes it has a bright future just by concentrating upon its own luxury car sector in which profit margins are high.

Mr John Egan, Jaguar's chairman, insists that the company is earning enough to cover not only spending on research, development and capital equipment (some £40m last year), but also future investment needs.

Jaguar's specialisation means that much will hinge upon the success of the launch next year of the new XJ 40 model. But even that uncertainty is unlikely to deter investors when the company comes to the market later this year—another pointer to the changing view of lower volume producers spotlighted by the MIT's study.



The advent of new materials

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mented in forecasting the advent of such cars in the 1990s, it would amount to nothing less than "a revolution" in the way in which cars were produced.

There remain huge problems before the forecasts become reality. According to Dr N. A. Waterman, of consultants Michael Neale and Associates, if all feasible substitutions of lighter plastics for metals were made in the car of 1990, the average weight of plastics per car would rise from 54.8 kg in 1980 to 104 kg. These items would include wings and aerodynamic underbody shells.

They would also increase by a factor of 10 the price of such a car.

Such a damning, totally uneconomic increase in a car's cost would indeed be partly due to the plastics being more expensive than metals as a material.

But much the biggest factor in the increase, he points out, would come from slower production rates. To stamp out a sheet metal part is a matter of seconds; for large moulded plastic sections currently it is a matter of minutes.

Nevertheless, given the development of appropriate processing ideas, such as faster curing resins, stampable thermoplastic sheet and similar advances, "plastics could just conceivably compete with steels for a higher proportion of the car."

Steel in any case will be difficult to dislodge, not least because steelmakers are not about to let go a lucrative market without a fight and are developing yet stronger, higher-carbon steel to save weight; while the steel supply structure is well established internationally, in contrast to plastics.

Inevitably, too, within the motor industry, there will be some inertia as designers and engineers tackle, perhaps with initial timidity, the new problems of an unfamiliar material.

What materials are used, in the end, will depend on bottom line criteria such as what best meets all the design requirements at the lowest overall cost. Even that is not a simple question of material costs, because no manufacturer will mind paying a £x premium for, say, a plastic substitute if it is going to save £2x in assembly time or lower capital investment.

Apart from sweeping changes such as using adhesives rather than welding to assemble such cars, the implications for everyone involved in the motor business are enormous.

Time scale

How fast will the transition be? According to Mr Yutaka Kume, head of Nissan's research and development department, the current composition of cars is about 80 per cent steel, 3 per cent aluminium and just under 5 per cent plastic.

"By 1990, the proportion of steel is expected to fall to 60 per cent, with aluminium and plastic each rising to 10 per cent. In addition, ceramics will account for about 2 per cent.

"This however, is only an estimate—the rising cost of plastic and aluminium could deter their wider use."

Heavy investment in research

MOTOR COMPONENT manufacurers around the world are under increasing pressure to fulfil a number of requirements from the major motor companies, relating primarily to weight, reliability, durability and most important of all, cost.

Increasingly, the purchasers of motor components are looking for further integration of a range of items previously fitted as single units, and are looking to the component suppliers to carry out the necessary research, development and design work to achieve this.

In the face of these demands, major British components manufacturers have had to invest more heavily in research and development equipment, from building to test rigs, with strong emphasis on computer-aided design and manufacturing systems.

GKN, for example, has recently invested more than £7m in a new products development centre at the Wolverhampton headquarters of GKN Technology, where a further £8m a year is spent on improving existing products and developing new ones.

The most startling of these is GKN's new composite epoxy resin and glass fibre leaf spring for commercial vehicles, a project launched in 1976 and now attracting inquiries from around the world.

Dr Peter Watson, GKN general manager, products development, pointed out that motor manufacturers will be buying far more technology from their components suppliers in future.

The new spring, which had undergone far more stringent tests than generally required, was paricularly important since it was made of a material which was not only lighter than steel, but less likely to fracture—one of the major problems with commercial vehicle springs.

GKN Technology employs around 300 people to solve problems for group companies, develop new products and carry out a limited amount of pure research, which occasionally turns up an important new process or material.

Importantly, it is also dedicated to updating manufacturing systems within the group, in which investment is now rising to around £100m a year. It is recognised that it is as important to be able to manufacture new components efficiently

Computer-aided design has had important effects on the design of many metal components, since the ability to pin point areas of high and low stress has enabled designers to eliminate unnecessary metal, thereby reducing weight. However, this has had implications for related components, where the weight change has had to be taken into account.

In addition, advanced testing techniques such as the computer systems which help assess the life expectancy of existing parts, are now helping to speed up the development of new generation of components.

GKN believe that components will increasingly be supplied in packages of related functions, since their integration tends to reduce manufacturing and assembly costs. "We have traditionally made axle beams, and now we are making springs, so they can be sold as a package. The problems with components usually arise where they are joined, so the advantages are obvious" GKN said.

One of the major areas of research at present relates to pistons, since they account for a high proportion of mechanical losses in an engine. The AE group is devoting considerable resources to reducing piston assembly weight, reducing friction and the maintenance or improvement of their integrity.

Components

LORNE BARLING

Recent developments in the squeeze casting process are making possible new techniques for improving piston performance, according to AE. The fatigue strength of the squeeze cast material compares favourably with that of a forging, AE believes, and has a clear advantage over a gravity casting.

"However, of greatest interest to the piston designer is the freedom which the method allows for the incorporation of alternative metal inserts without the fear of voids or porosity" AE said.

An insert of close knit metal or ceramic fibres can be incorporated for local reinforcement, an increasingly important technique for the motor industry as a whole.

Lucas Industries has announced large investments in high technology manufacturing systems for its increasingly sophisicated range of electronic and non-electronic motor components.

Dr Tony Jarrett of Lucas said recently that the field of technology management was being approached under five broad headings — technology forecasting, product technology audits, developing a technology base, technology information transfer and technology education.

At Lucas, technology forecasting was a continuous exercise. In forecasting the shape and nature of vehicles of the future, the company relied not only on its group research centre, but on input from major subsidiaries with specialist knowledge in the fields of electrics, braking systems and diesel fuel injection equipment.

In addition it drew on outside information sources about trends in design and developmen across the world.

Each Lucas operating company had its own technology audit of capability and capacity. These were revealing exercises, Dr Jarrett said, and the objective of the audits were to check that business plans were sufficiently defined to construct a long-term product engineering plan, to unearth areas of technology weakness and to provide a feedback to the business planning activities to ensure that these and the technical resources were properly matched.

The burden of design grows heavier

CONTINUED FROM PAGE 1, COL. 5

generates excitement. There is little point in producing a vehicle so efficient in its aerodynamic qualities that it sacrifices accessibility, comfort and interior space to an unreasonable degree."

This does not imply a conservatism, however. As Mr Axe's interior design director, Richard Hamblin, points out, there is no reason why there should not be major developments in all areas of the car. One of the areas his own team is researching as a "super credit card," used to gain entry to the car, and with coding to automatically adjust steering column, mirrors, heating ventilation—even "operate petrol pumps, debit the driver's account and open the garage door at home."

One effect of the computerisation of the design process has been, obviously, to enhance enormously the in-house design capabilities of a manufacturer. Inevitably, this has raised the question of what this capability means for the livelihoods of the independent design and engineering consultancies which have long made much of their living from design services to the big manufacturers.

But well-known design houses, like Ital Design of Italy, stress that computers cannot of themselves create the design concepts, and that the design houses' original thinking, plus the need of manufacturers for a faster flow of designs, will keep them in business.

Perhaps there are few better examples than International Automotive Design in the UK. John Shute, its chairman, started the company only in 1976, with a handful of people. It now employs 325 people, half of them overseas at client manufacturers' plants. Its consultant engineering, styling and prototype building service are expected to produce a £7½m-plus turnover this year and this month it has just finished installing nearly £½m worth of its own computer aided design equipment, on a par with manufacturers'. Its computer room is already working on doube shifts.

Shute is intensely aggressive about the business: "We're now in a position to rival the Italian design houses, some of which have in any case gone down in their reputations."

He acknowledges, however, that the UK design and engineering houses have been slow to market their expertise internationally, even though their skills "rank with the best in the world.

"But that's symptomatic of the whole UK motor industry—the Continentals simply are much better at telling you how good they are."

He has no time for the doubts sometimes expressed about the technical, rather than production capabilities, of Japanese manufacturers. The vehicles at the last Tokyo show, he says, "were mind-bending. If Ford, VW etc want to stay in business they had better watch out. The Japanese have got super ideas there."

In turn, Lotus believes that it should be compared with Porsche of West Germany, rather than the Italians. "We can do all the things that Porsche do . . . certainly Toyota (now with a 17 per cent shareholding in Lotus) see us as that," points out its chief executive, Mr Michael Kimberley.

Lotus, since entering contract engineering business with the De Lorean development contract in 1978, has expanded this side of its business substantially, with several dozen client companies.

But Mr Kimberley makes the same point about the UK industry's marketing abilities and design take-up, even more strongly:

"Our design is second to none; our exploitation of it is bloody awful."

He expresses a deep worry that while much innovative design is produced in the UK, it is being bought up not by UK industry, but by rivals, mainly from Japan and the U.S.

It should, he suggests, be "a source of great government and industry concern."

One problem, he suggests, is that "if you look at the typical board of a large UK company—what sort of product knowledge have its members got? Usually hardly any. That's where the Japanese score—the top two are always finance and engineering men, with commercial training on top of engineering training.

The problem though, he says, goes deeper. "We've got to change the whole educational system so that good design is encouraged."

Tom Karen, managing director of Ogle Design, broadens the argument further, into what he and others in the design field feel is a chronic shortage of venture capital funding for innovation.

"The Japanese actively scavenge for good ideas; from the U.S., from Europe, anywhere. What sort of response do you get in Britain? 'We don't want to buy; we don't want to risk it—in short, go away.'

"Why is it not possible for the financial world to say to the Government: 'for every pound you put in to finance design and development, we will match it'—that's right, even if it's not linked to a direct financial return?"